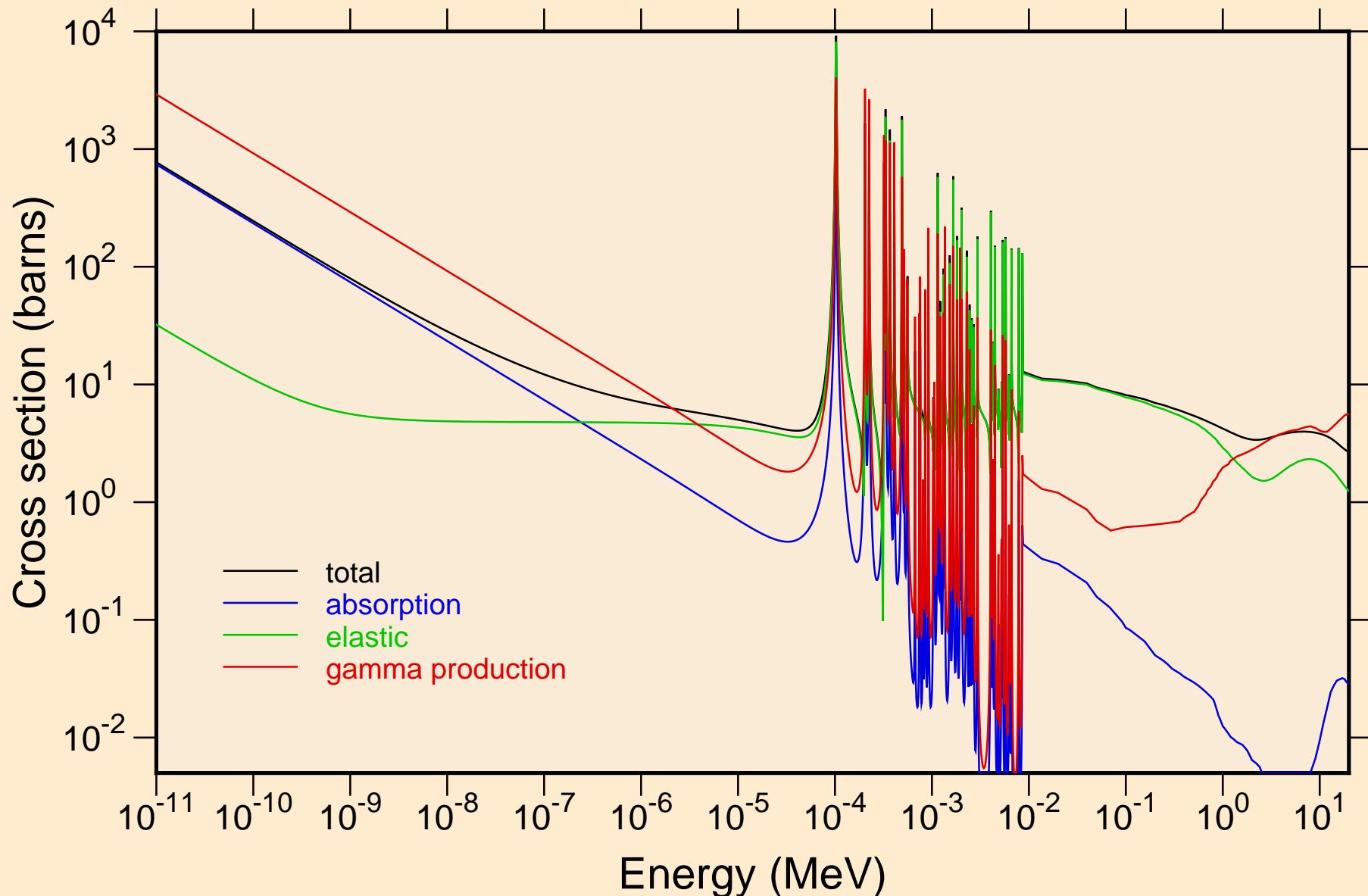


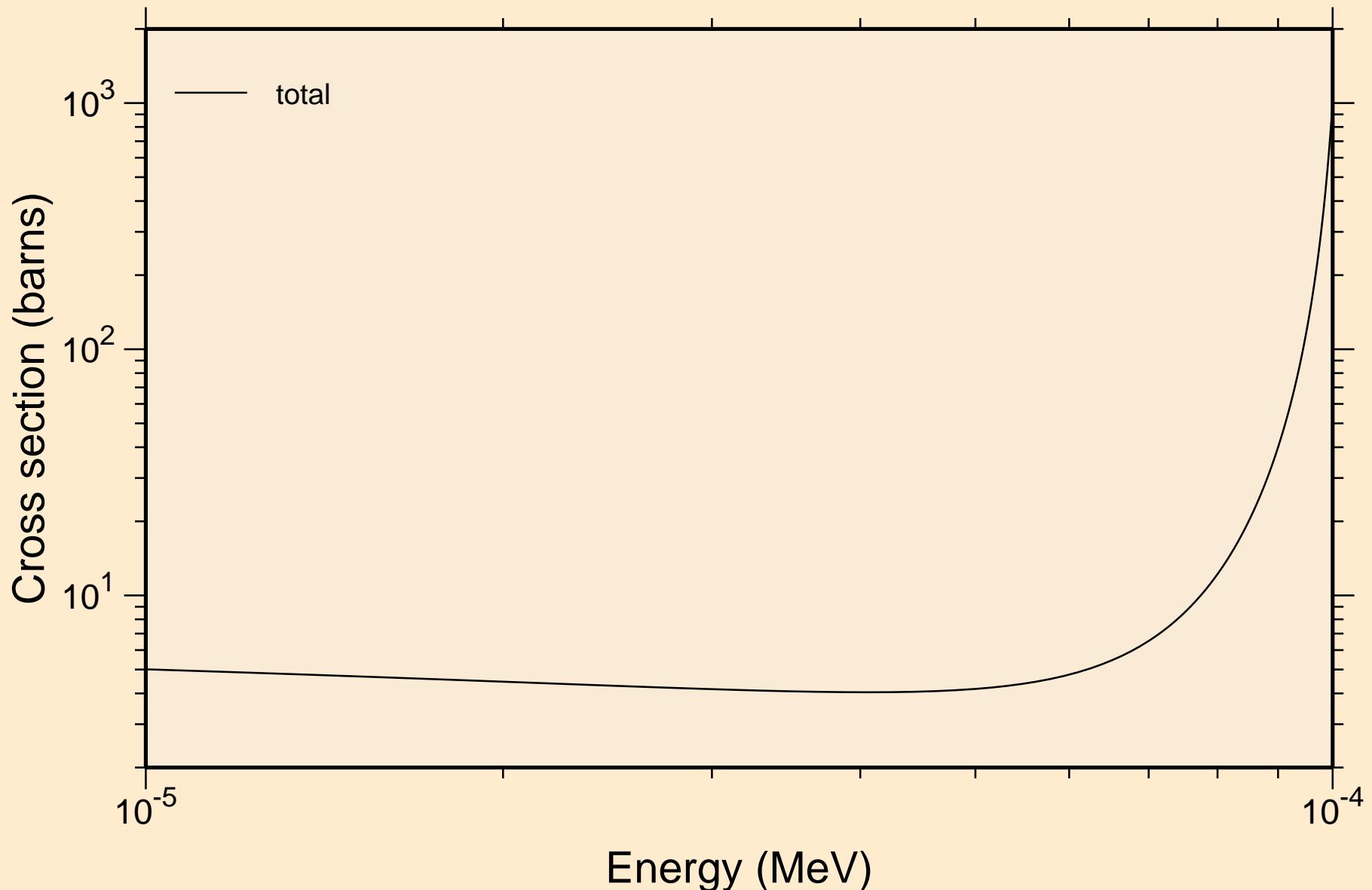
ADVANCE CALCULATIONS

Principal cross sections



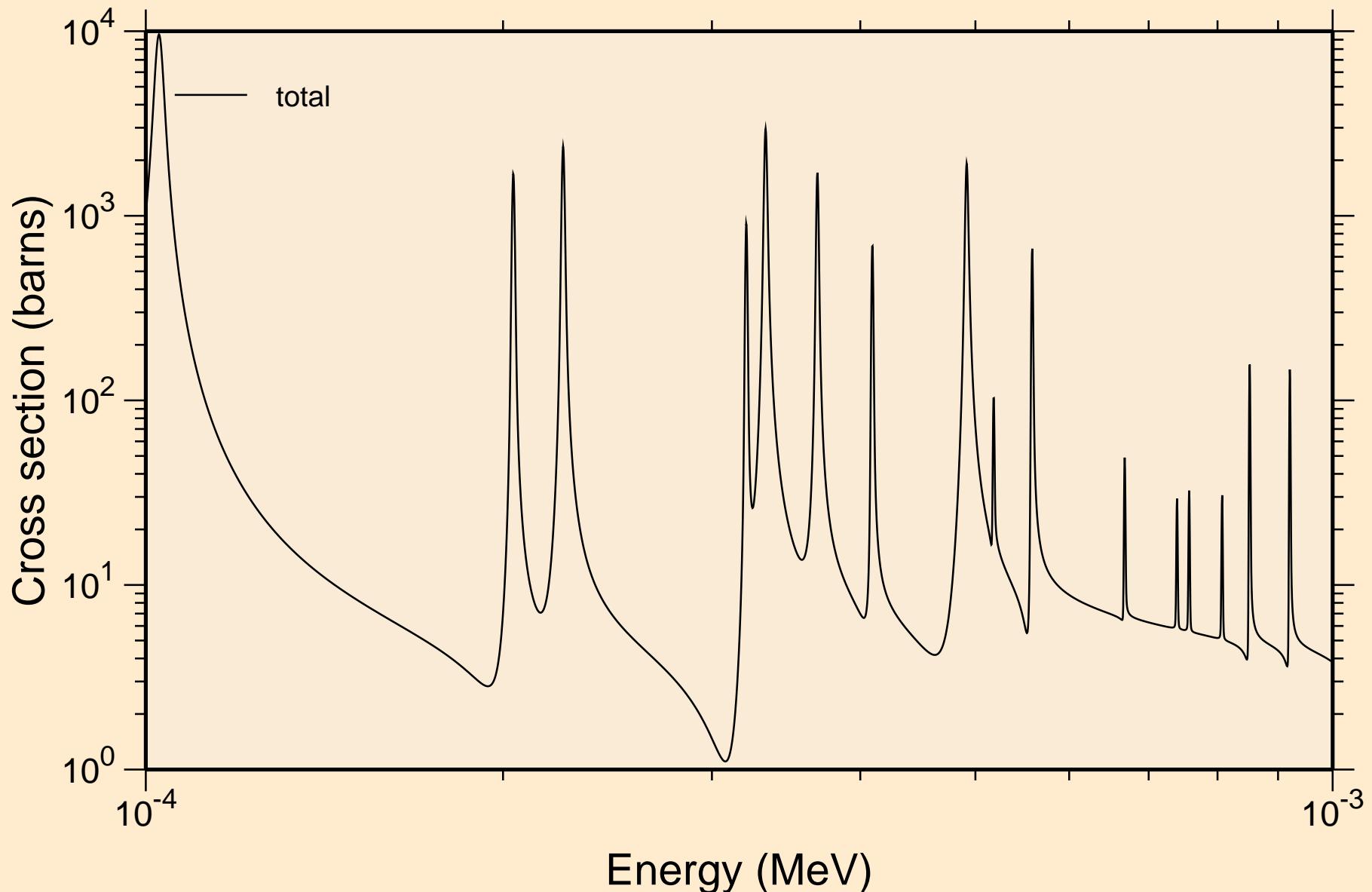
ADVANCE CALCULATIONS

resonance total cross section



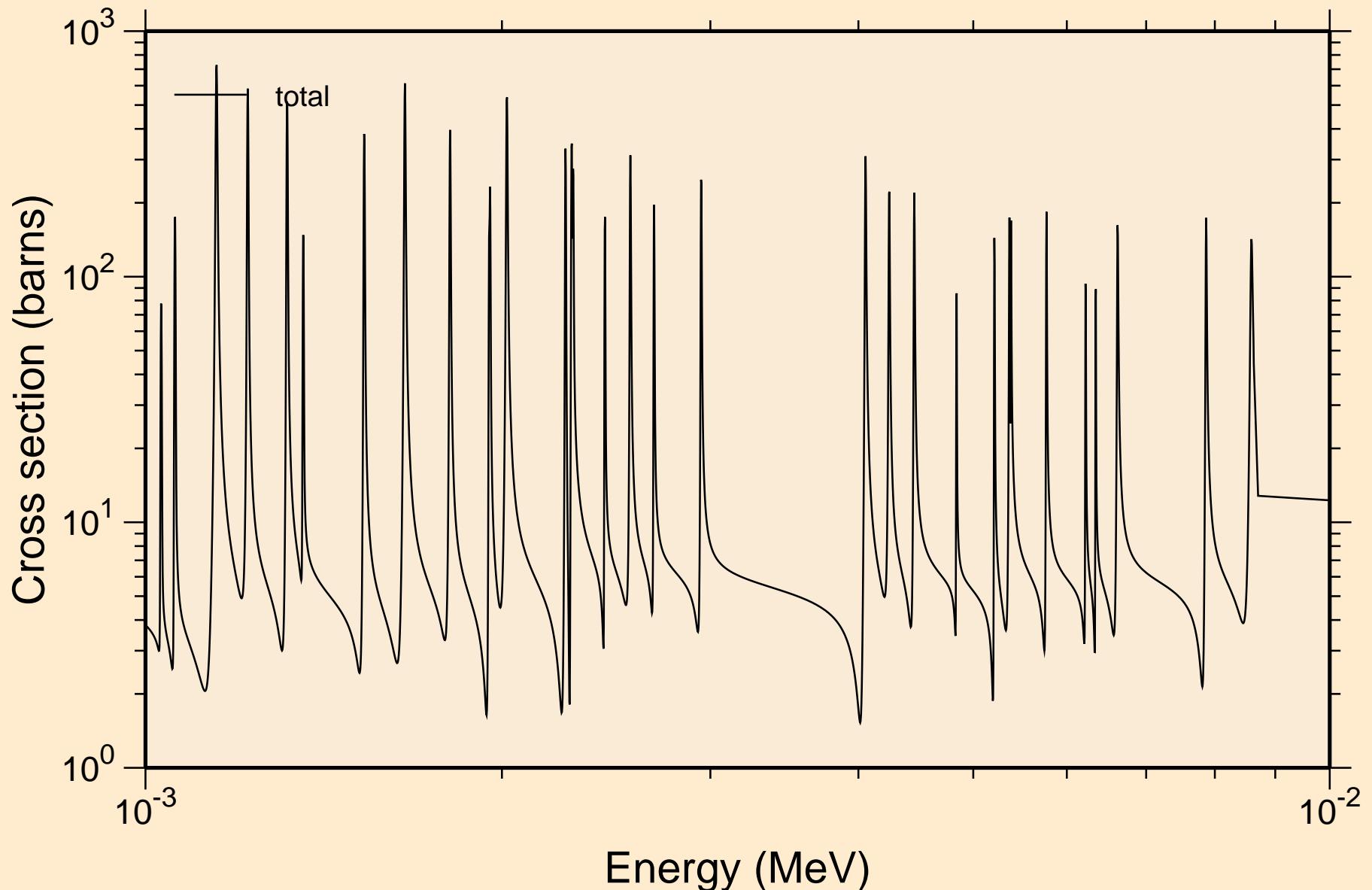
ADVANCE CALCULATIONS

resonance total cross section



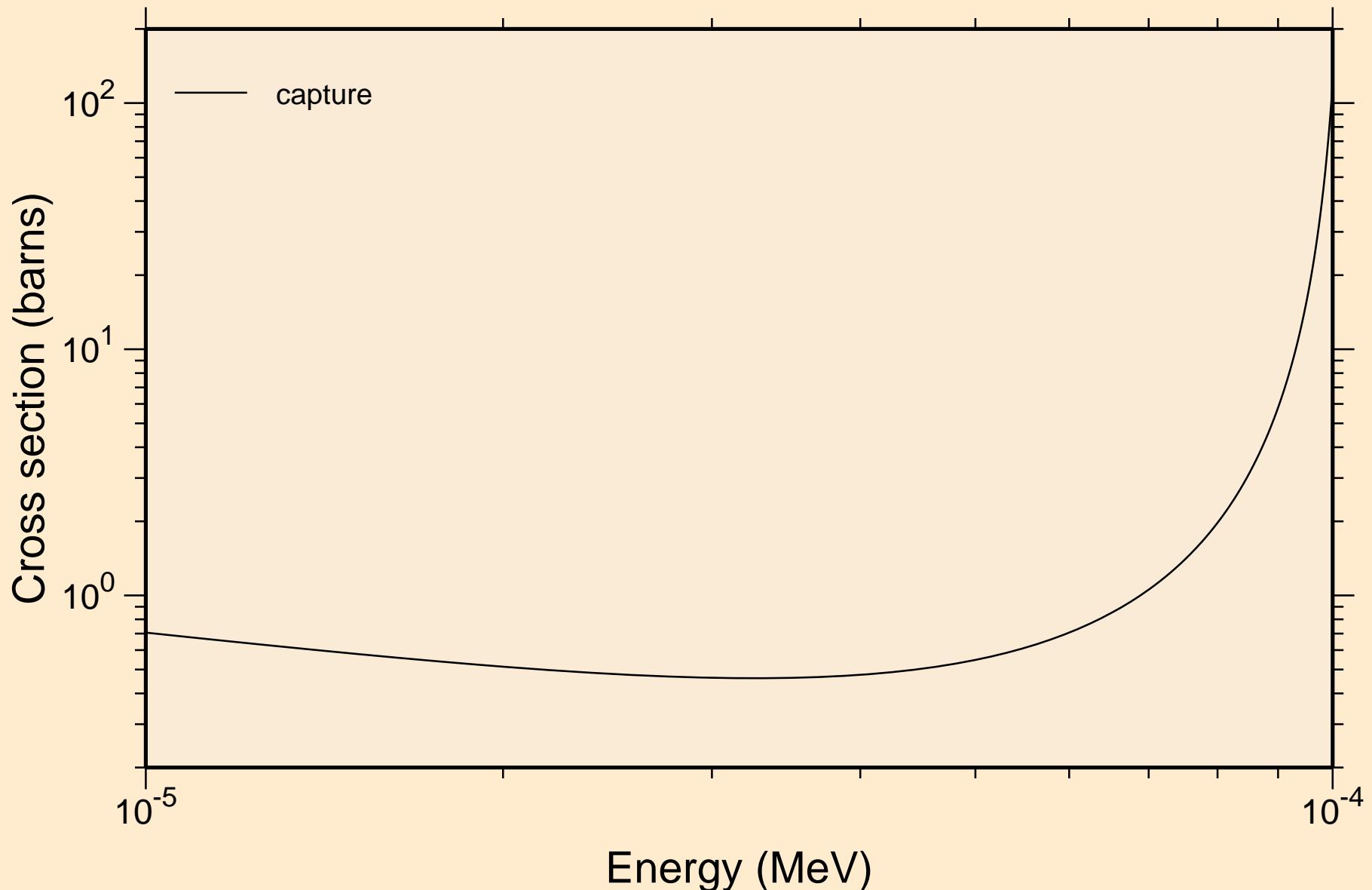
ADVANCE CALCULATIONS

resonance total cross section



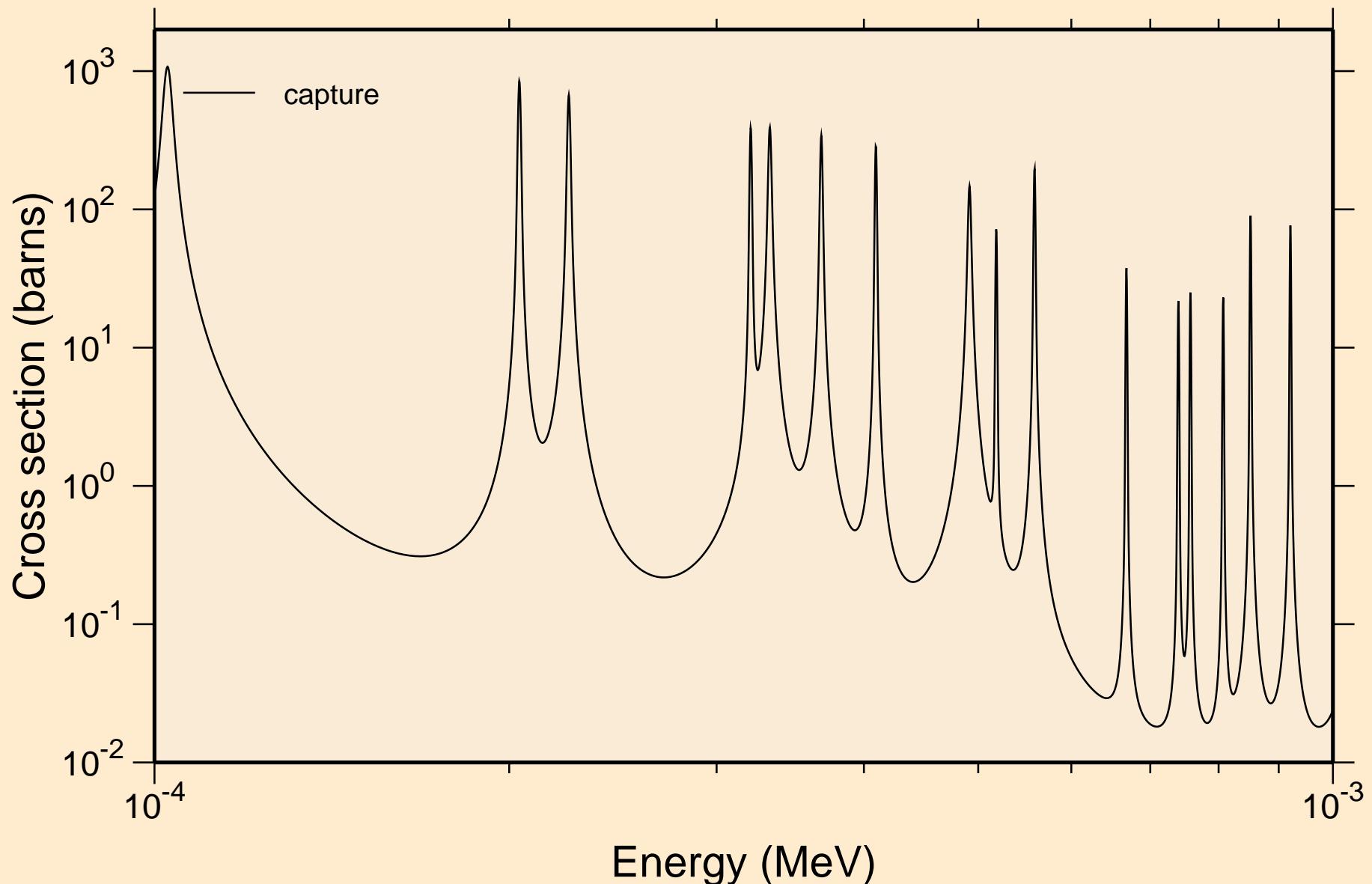
ADVANCE CALCULATIONS

resonance absorption cross sections



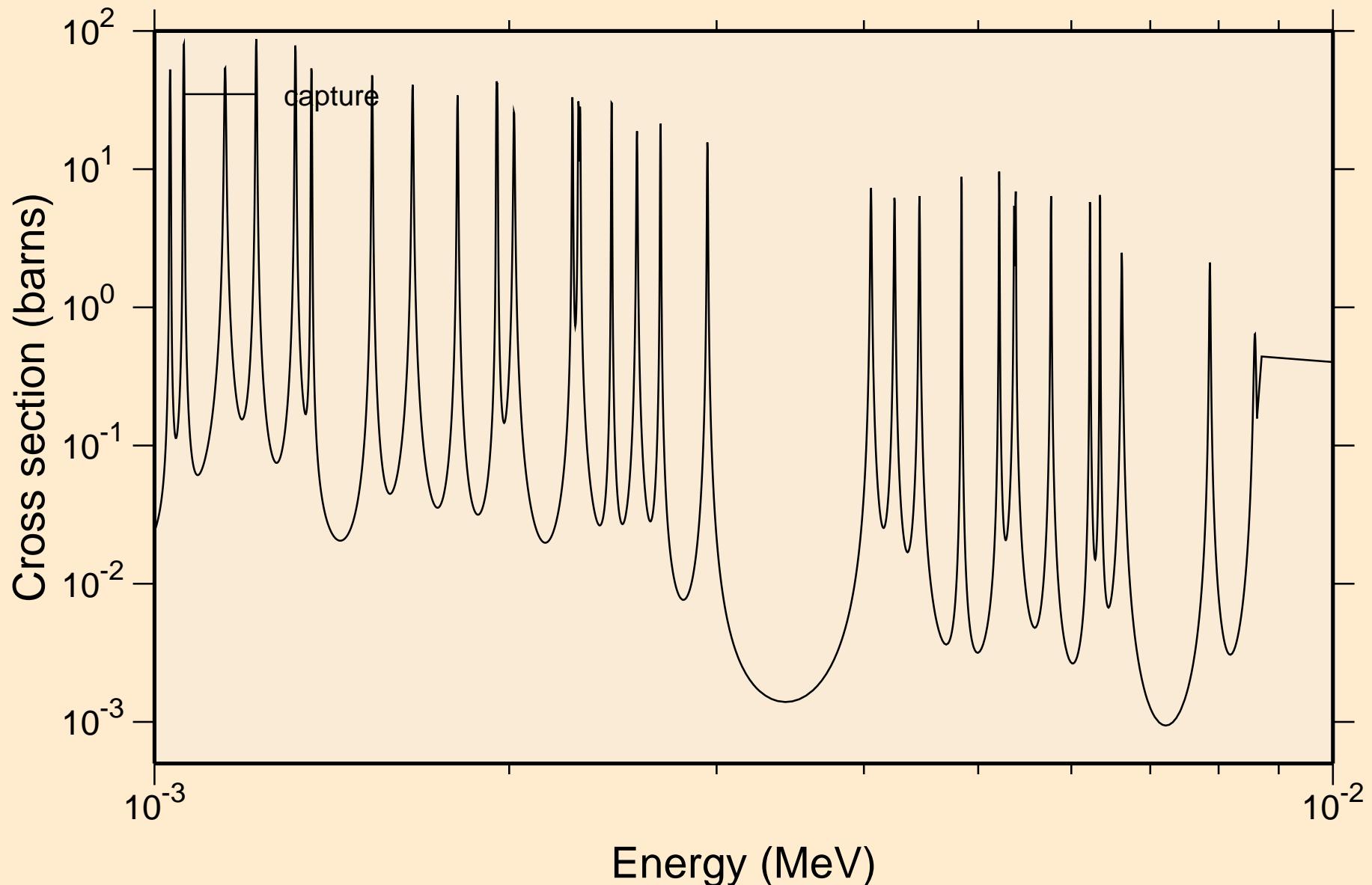
ADVANCE CALCULATIONS

resonance absorption cross sections



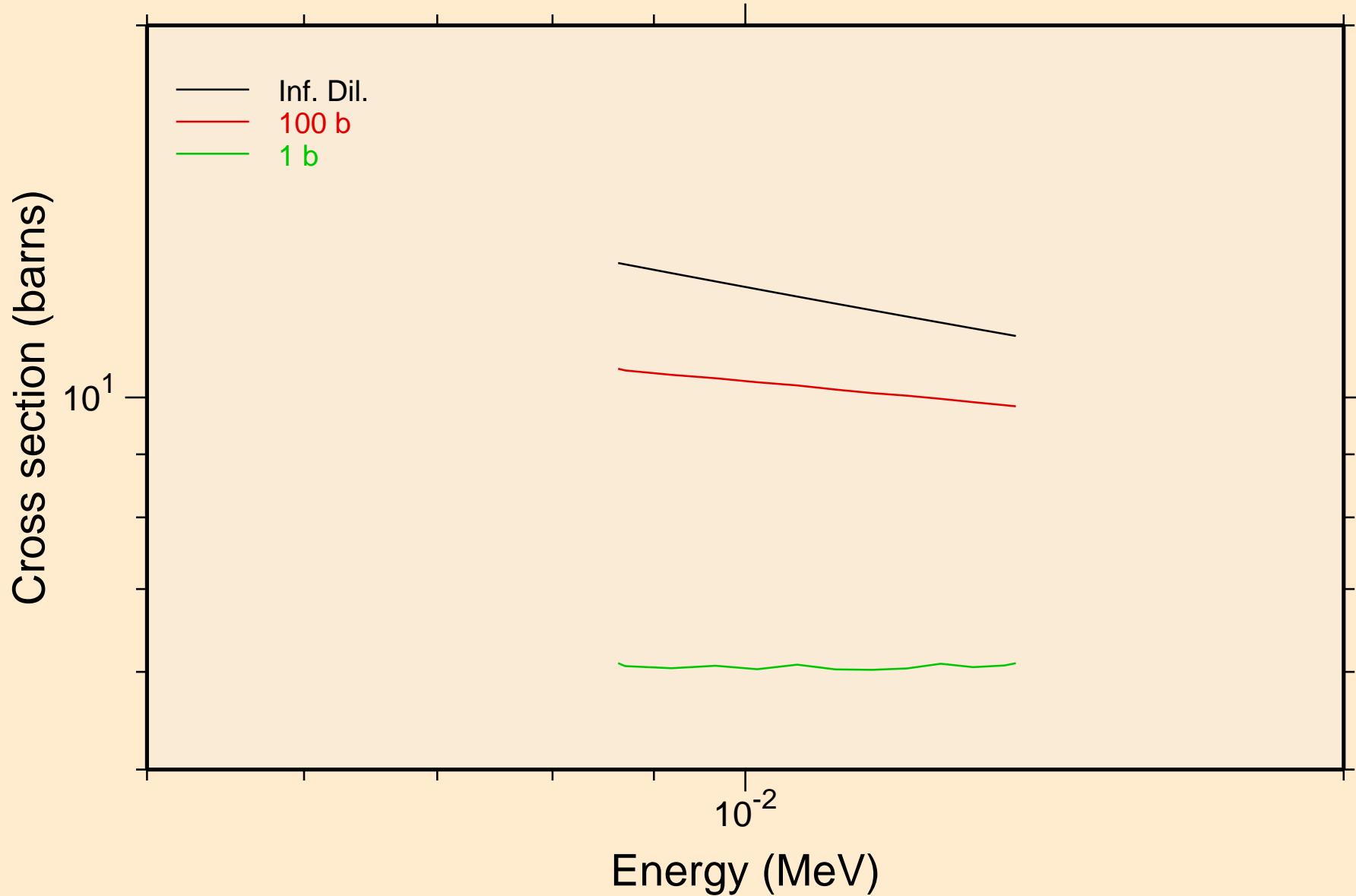
ADVANCE CALCULATIONS

resonance absorption cross sections



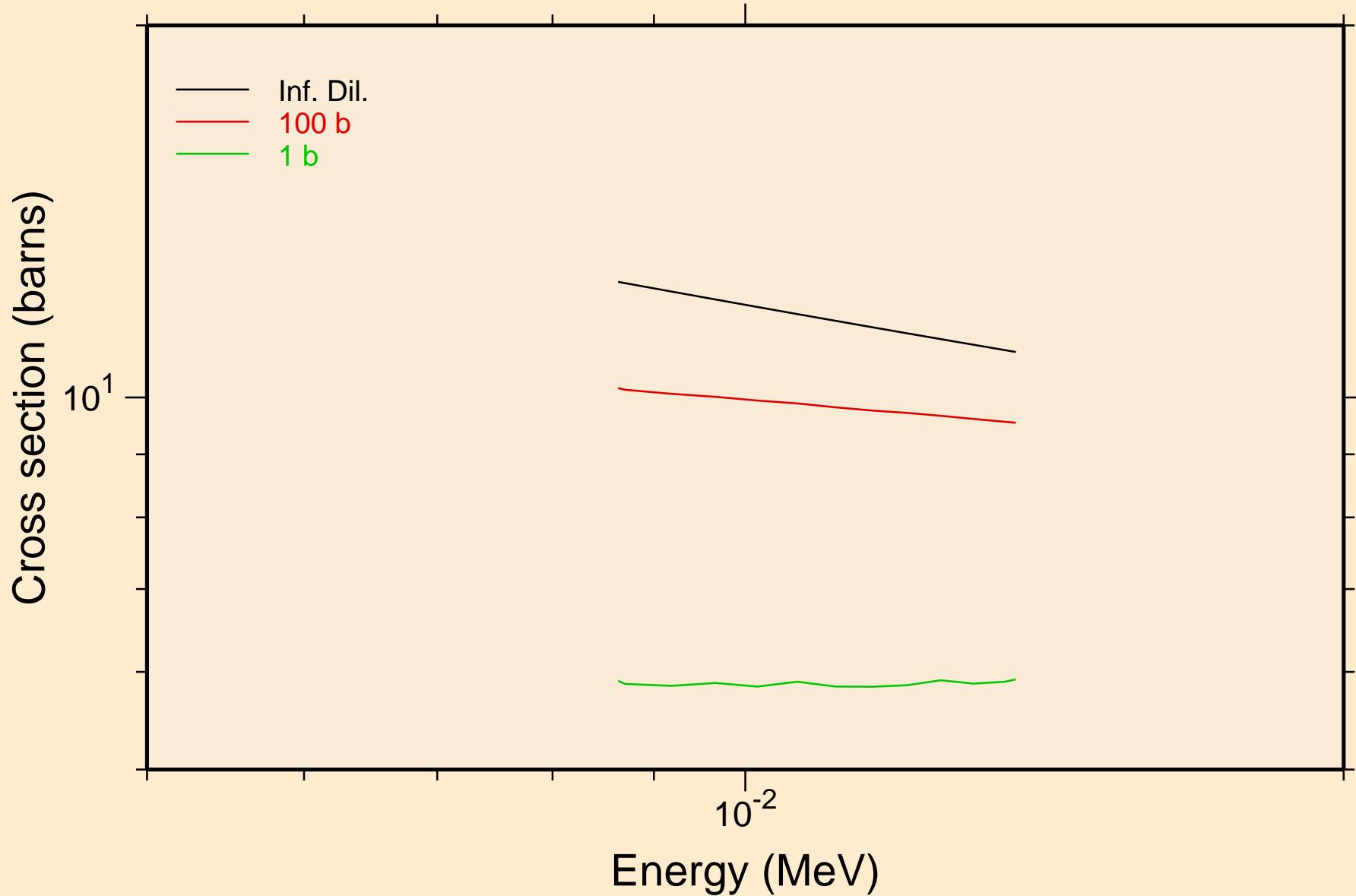
ADVANCE CALCULATIONS

UR total cross section



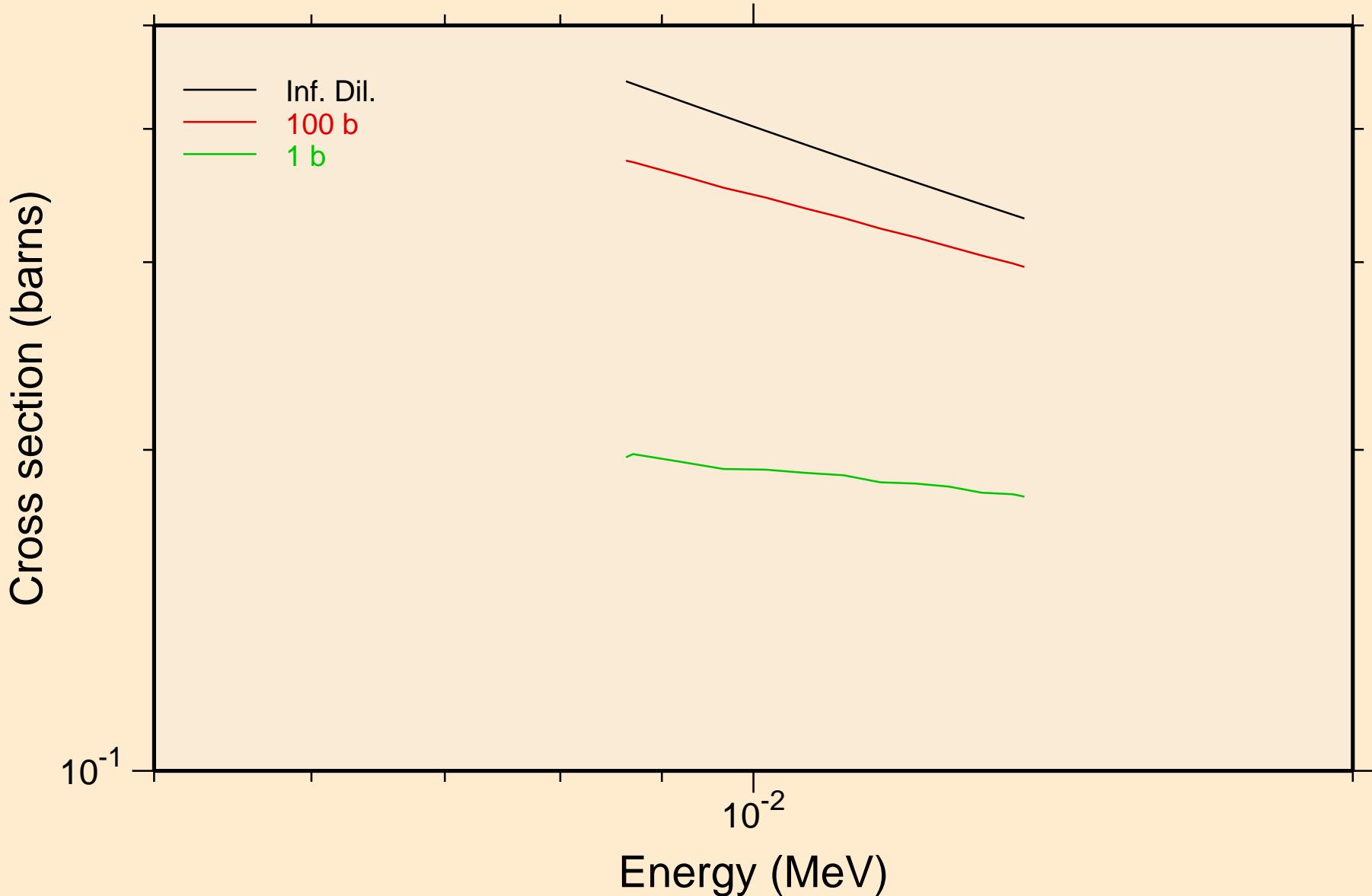
ADVANCE CALCULATIONS

UR elastic cross section



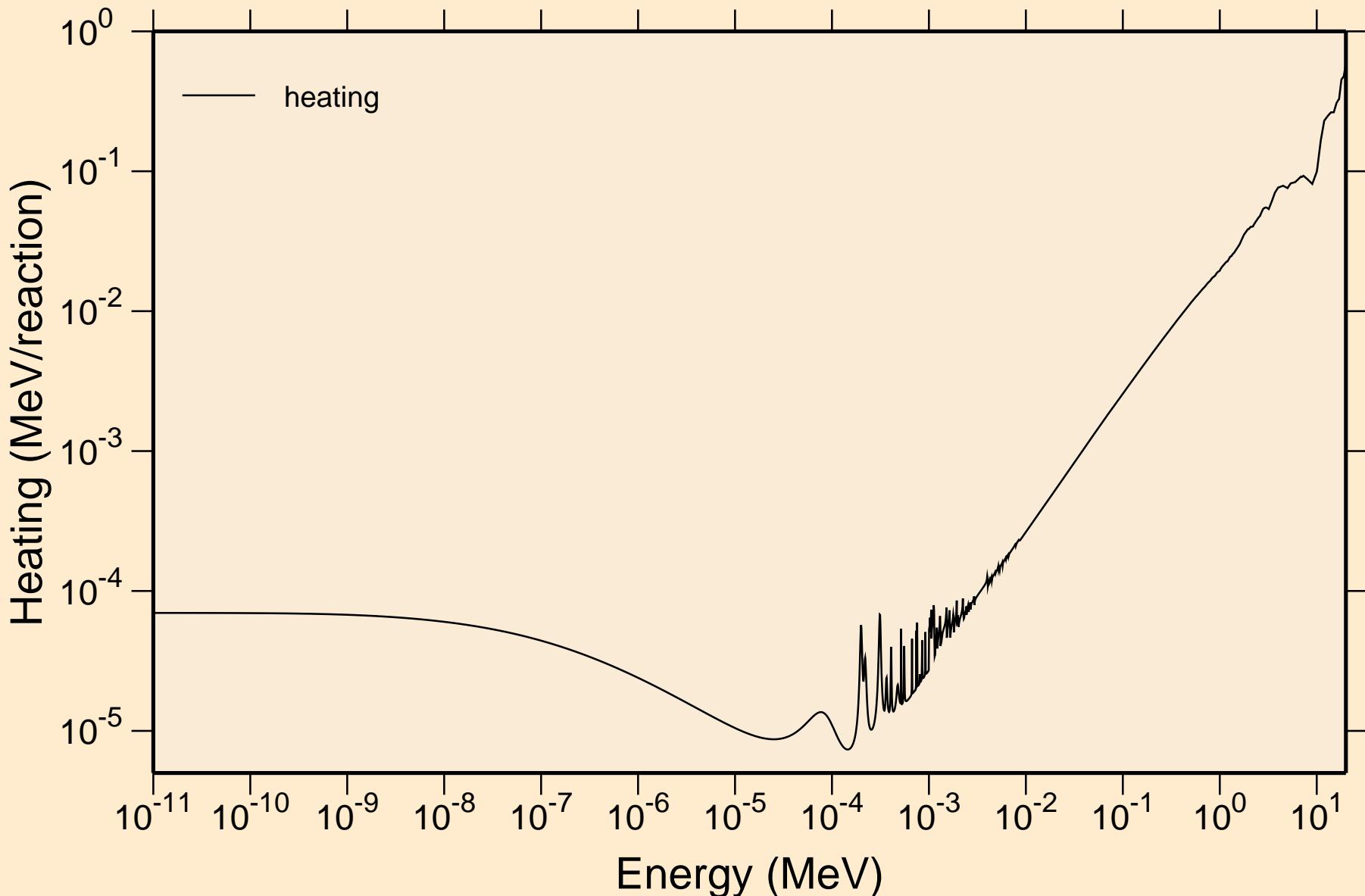
ADVANCE CALCULATIONS

UR capture cross section



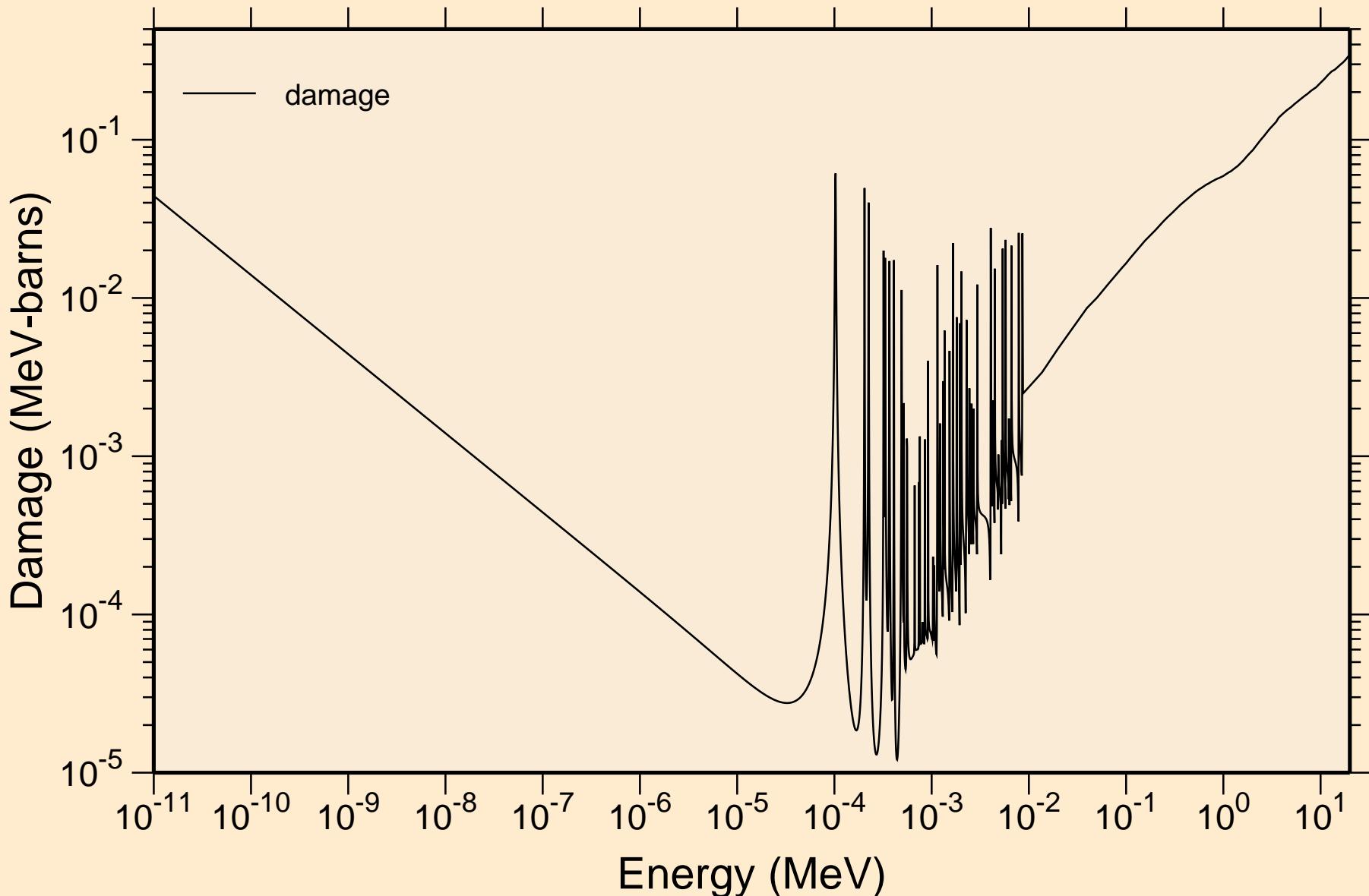
ADVANCE CALCULATIONS

Heating



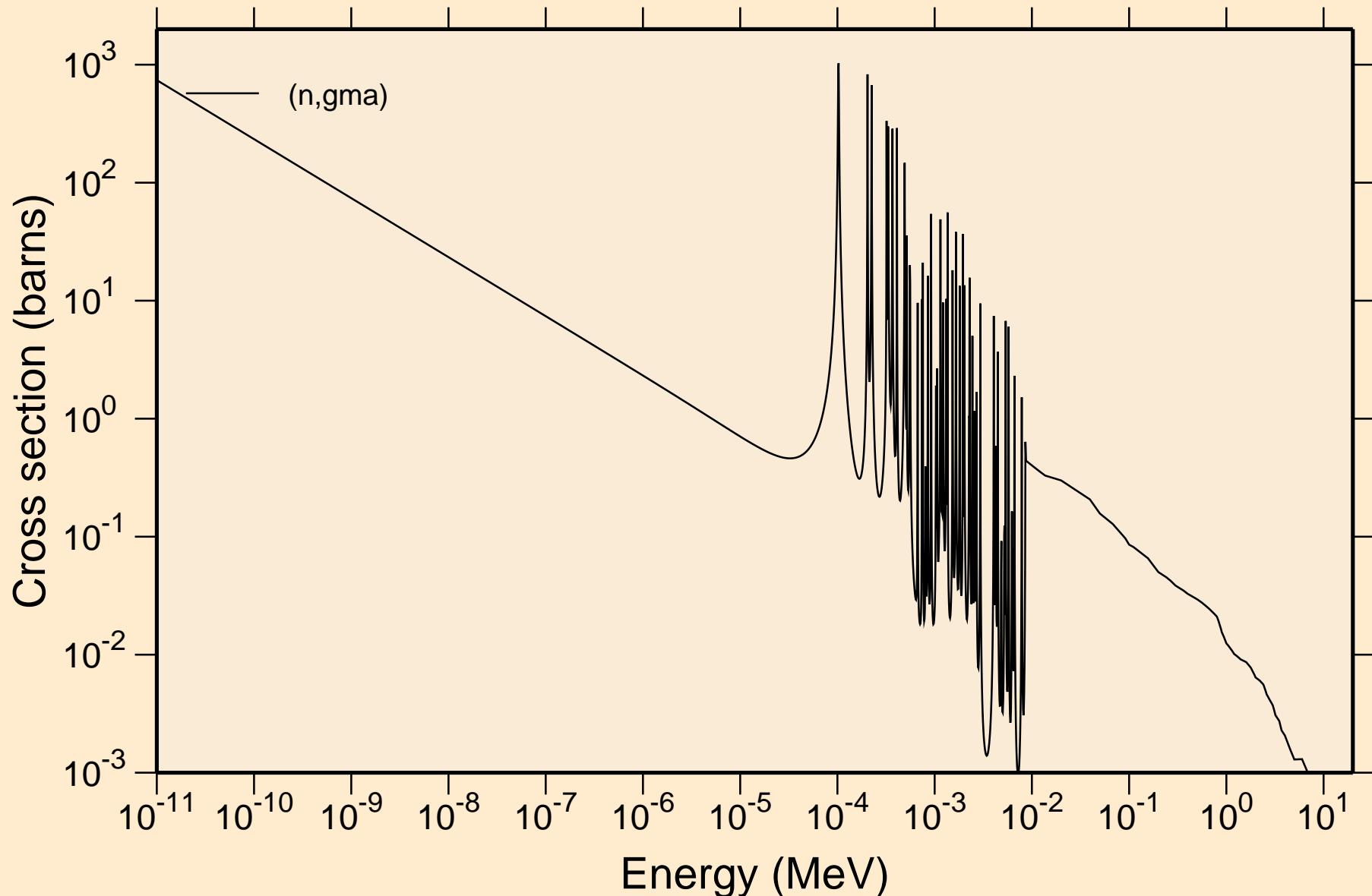
ADVANCE CALCULATIONS

Damage



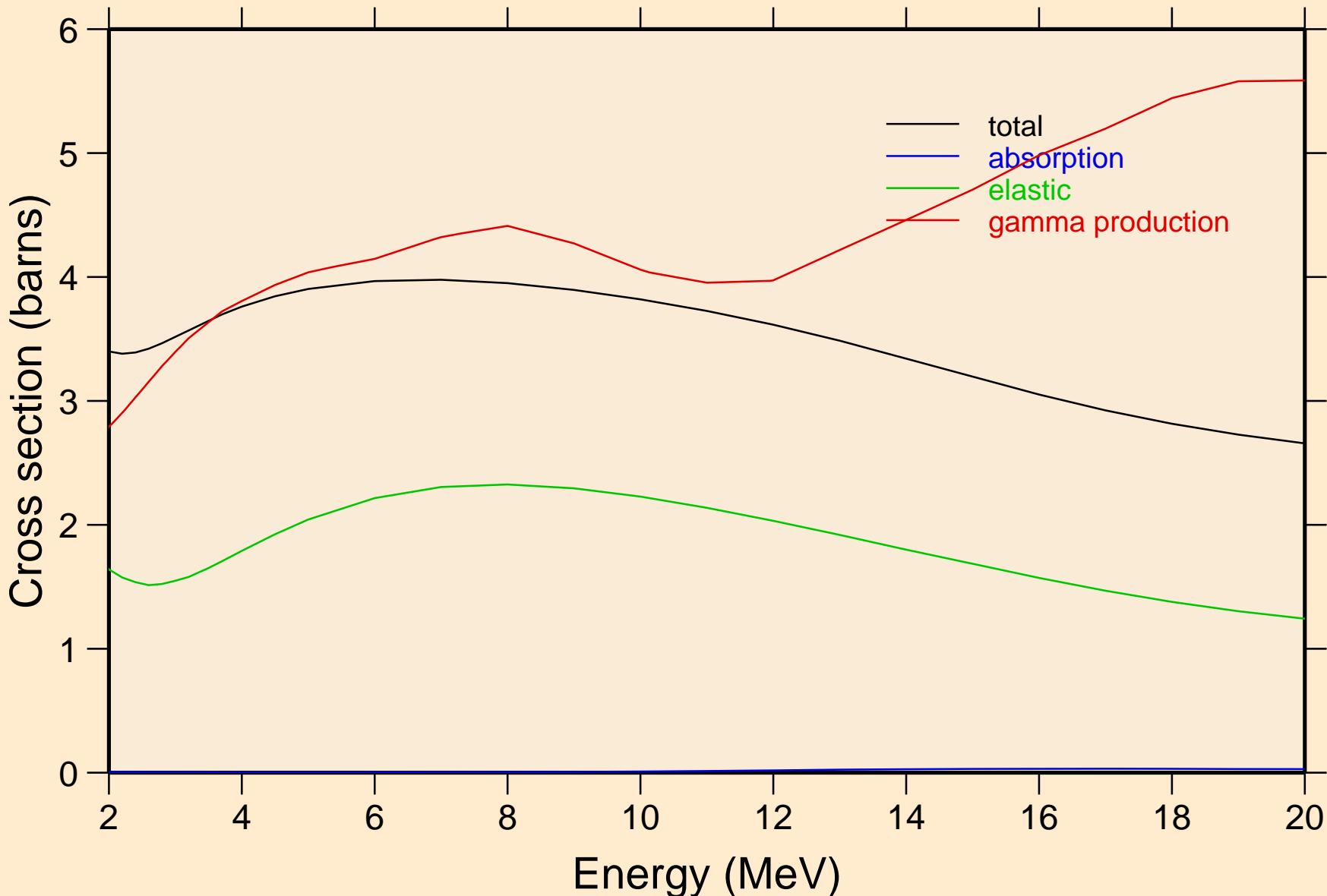
ADVANCE CALCULATIONS

Non-threshold reactions



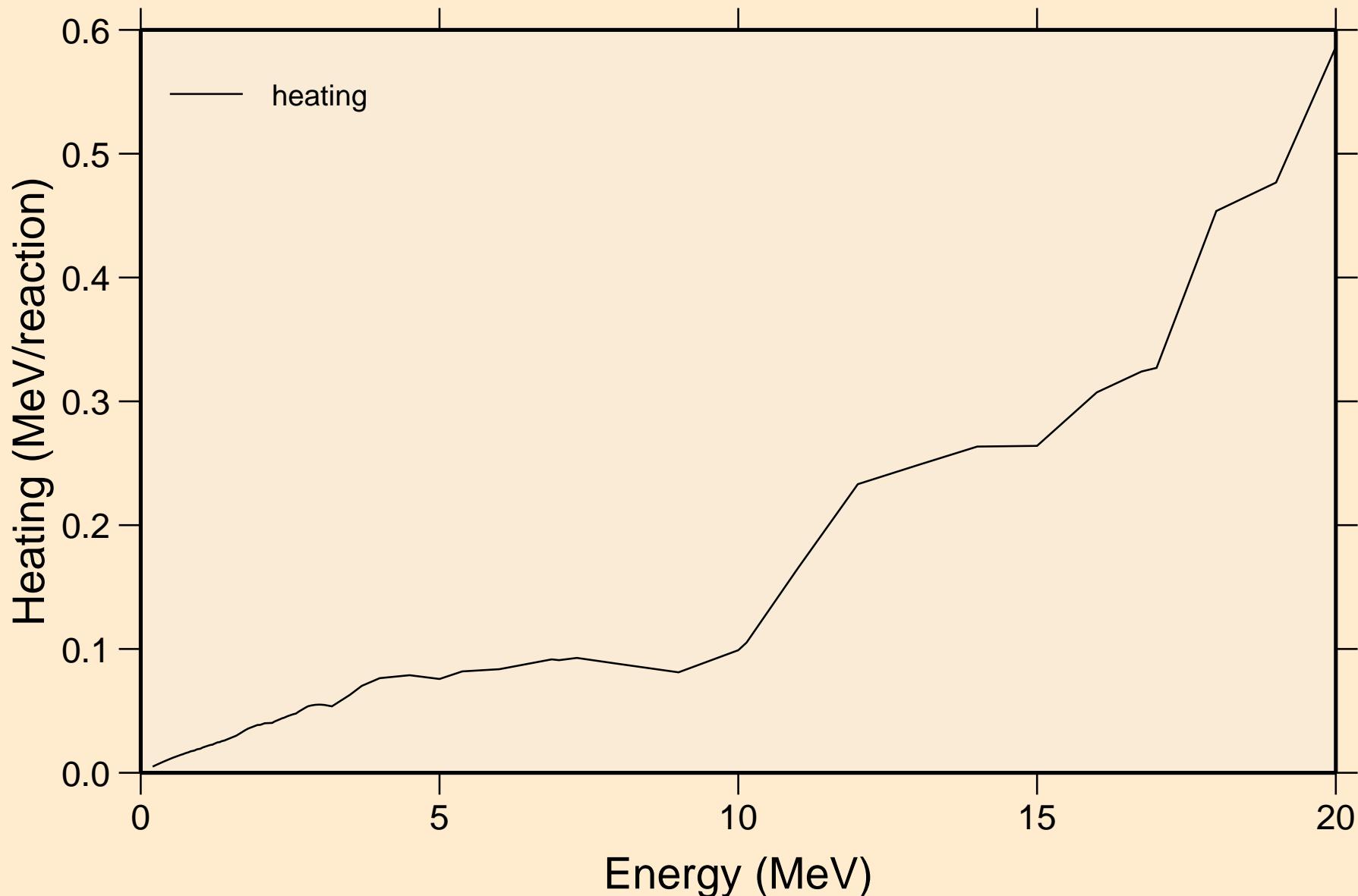
ADVANCE CALCULATIONS

Principal cross sections



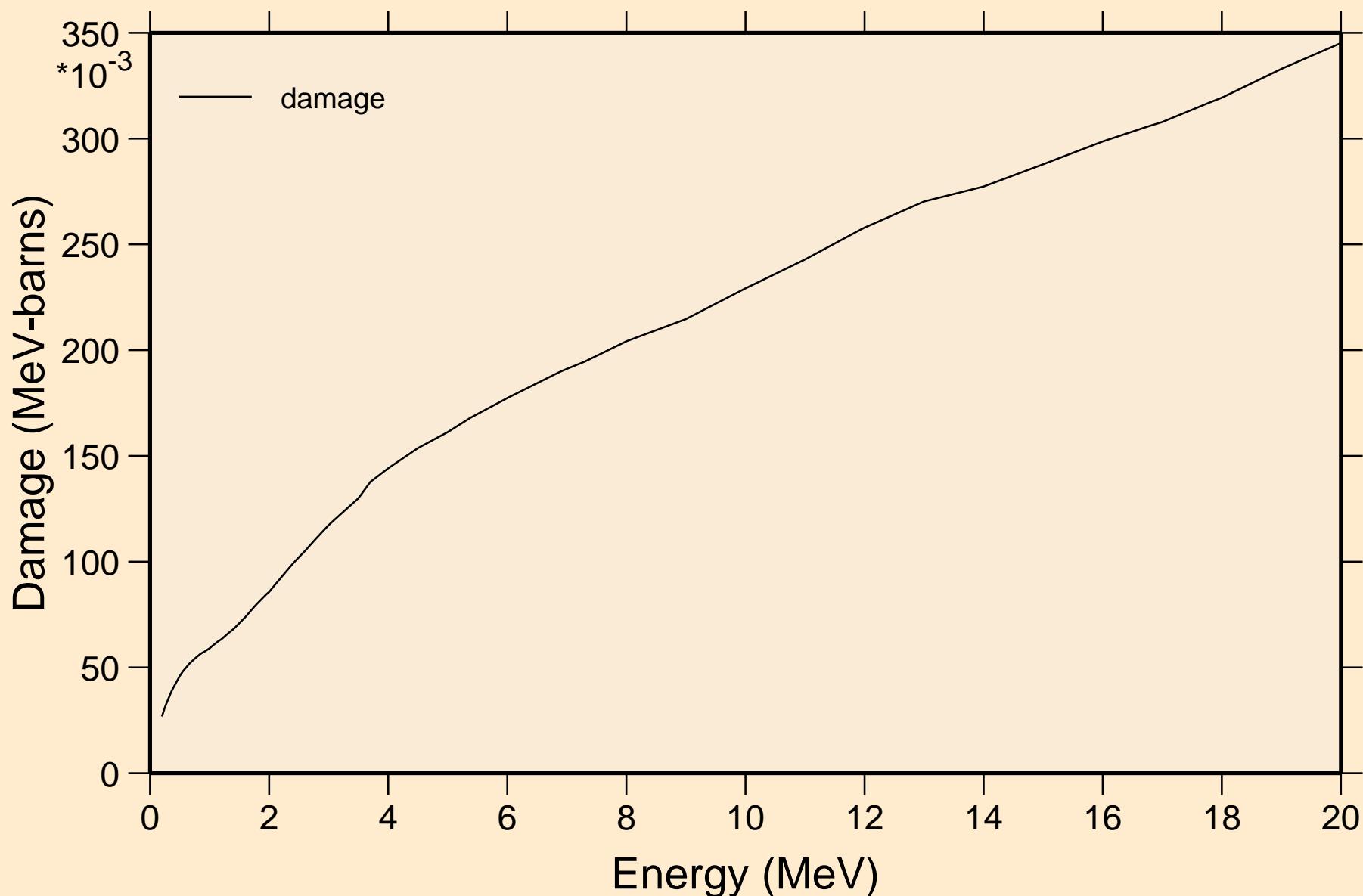
ADVANCE CALCULATIONS

Heating



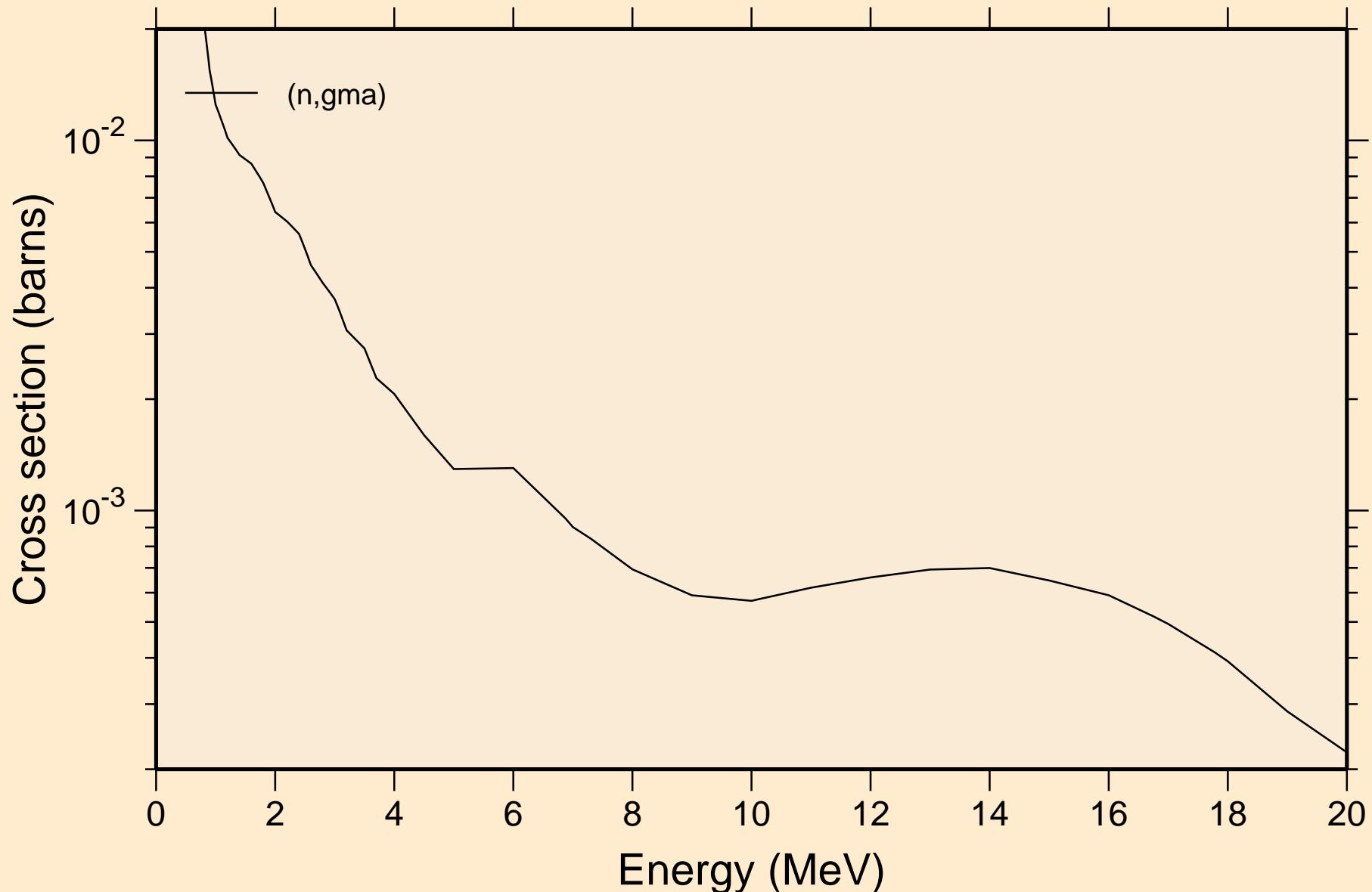
ADVANCE CALCULATIONS

Damage



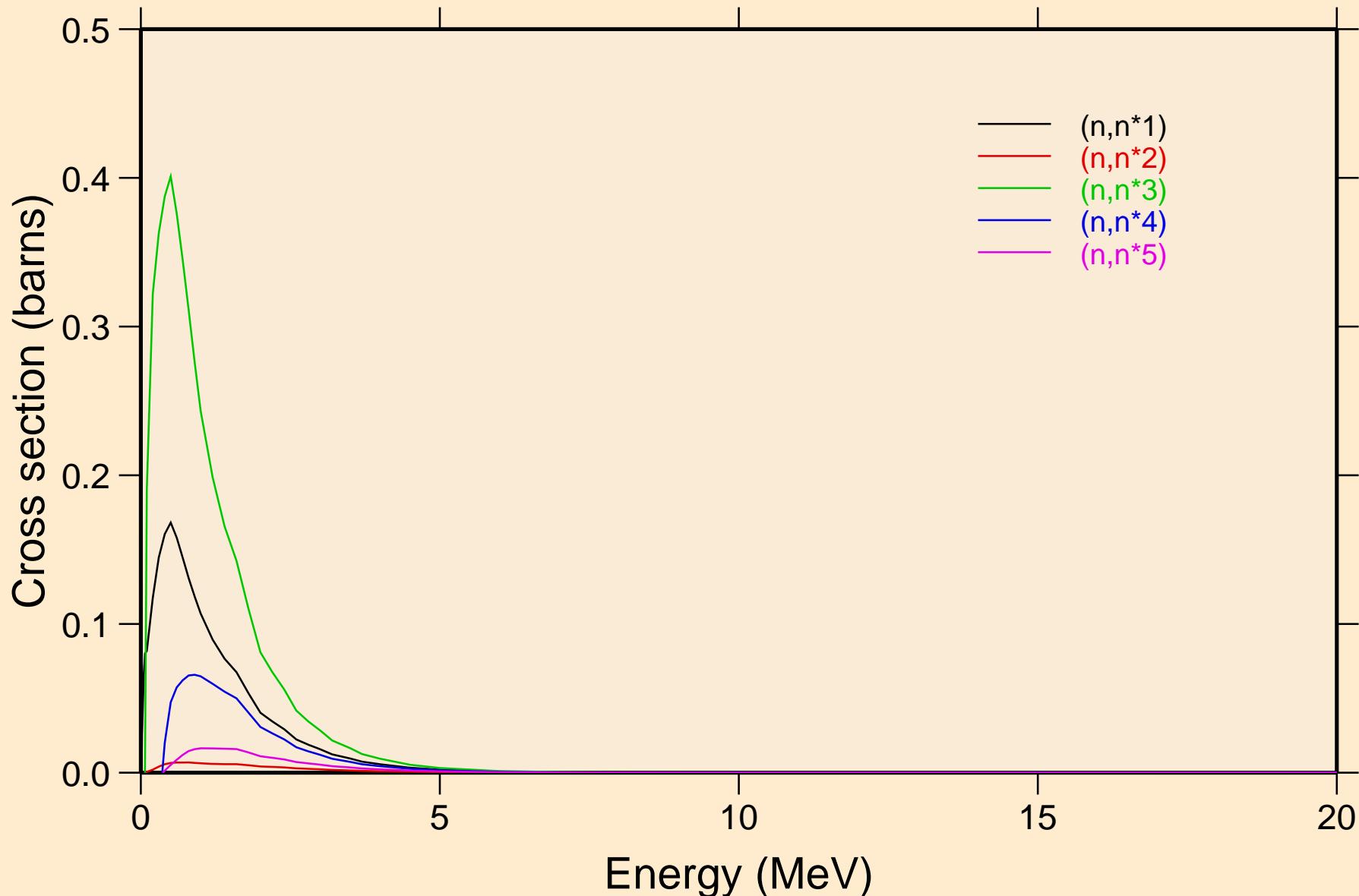
ADVANCE CALCULATIONS

Non-threshold reactions



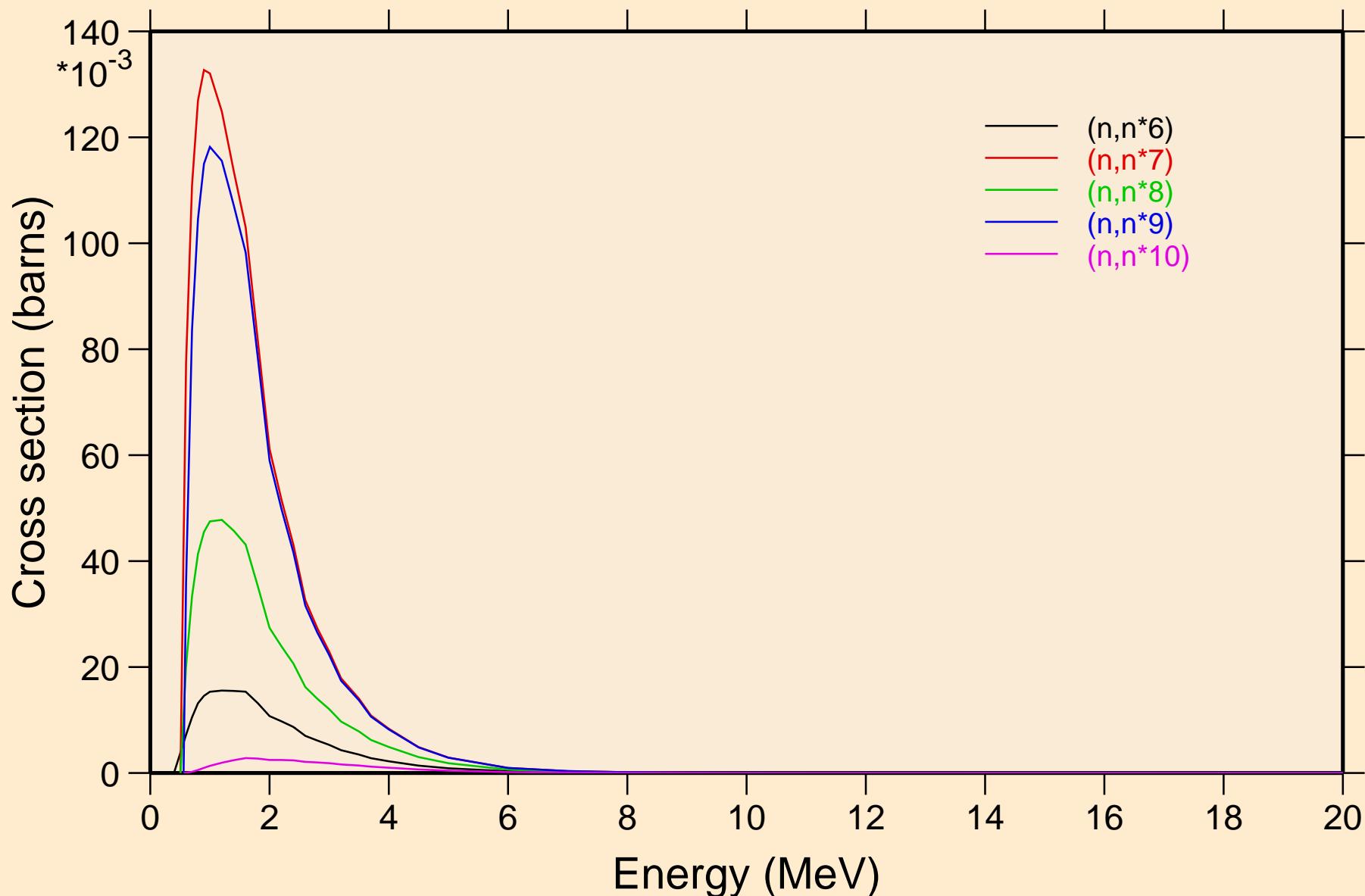
ADVANCE CALCULATIONS

Inelastic levels



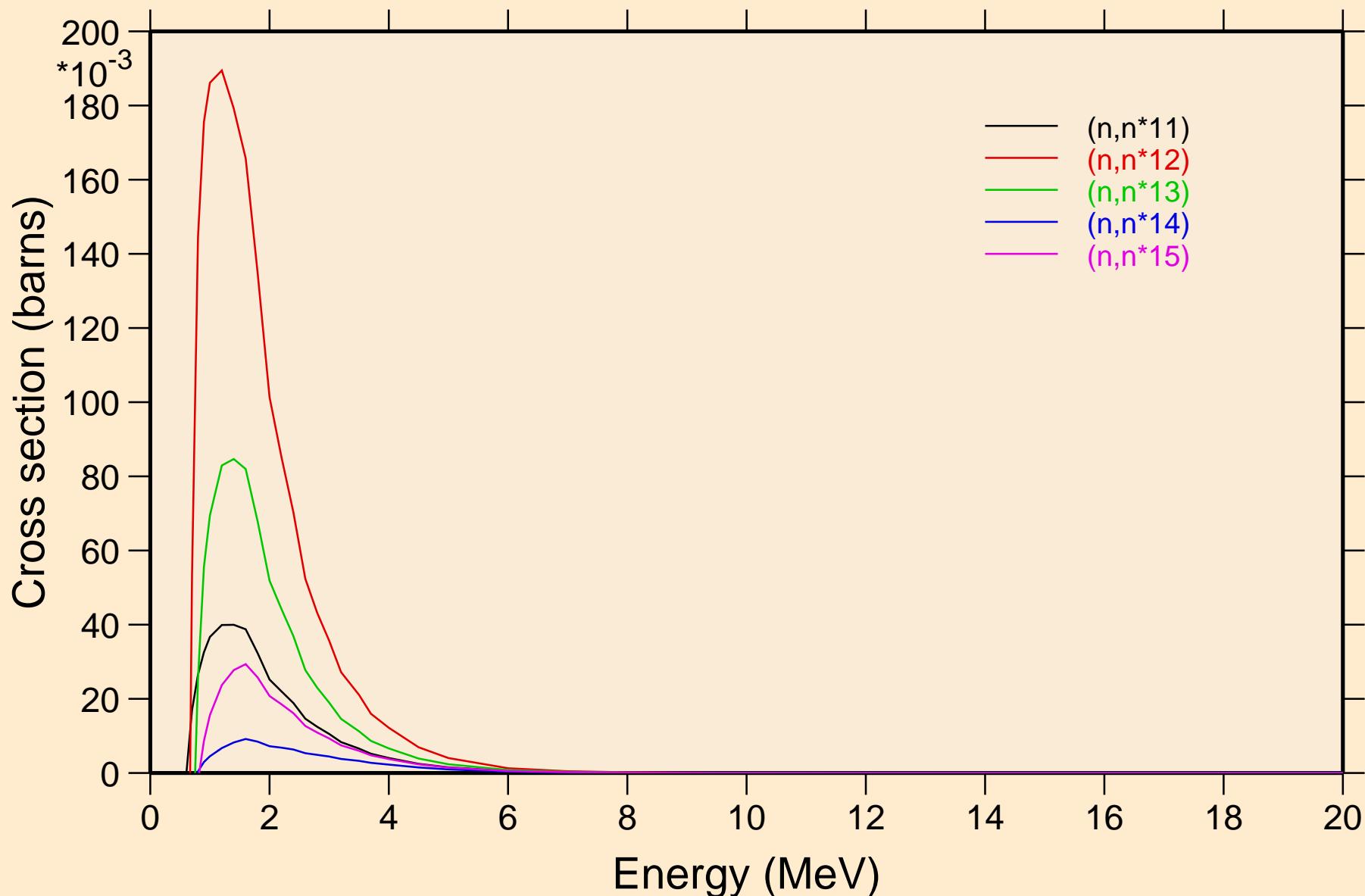
ADVANCE CALCULATIONS

Inelastic levels



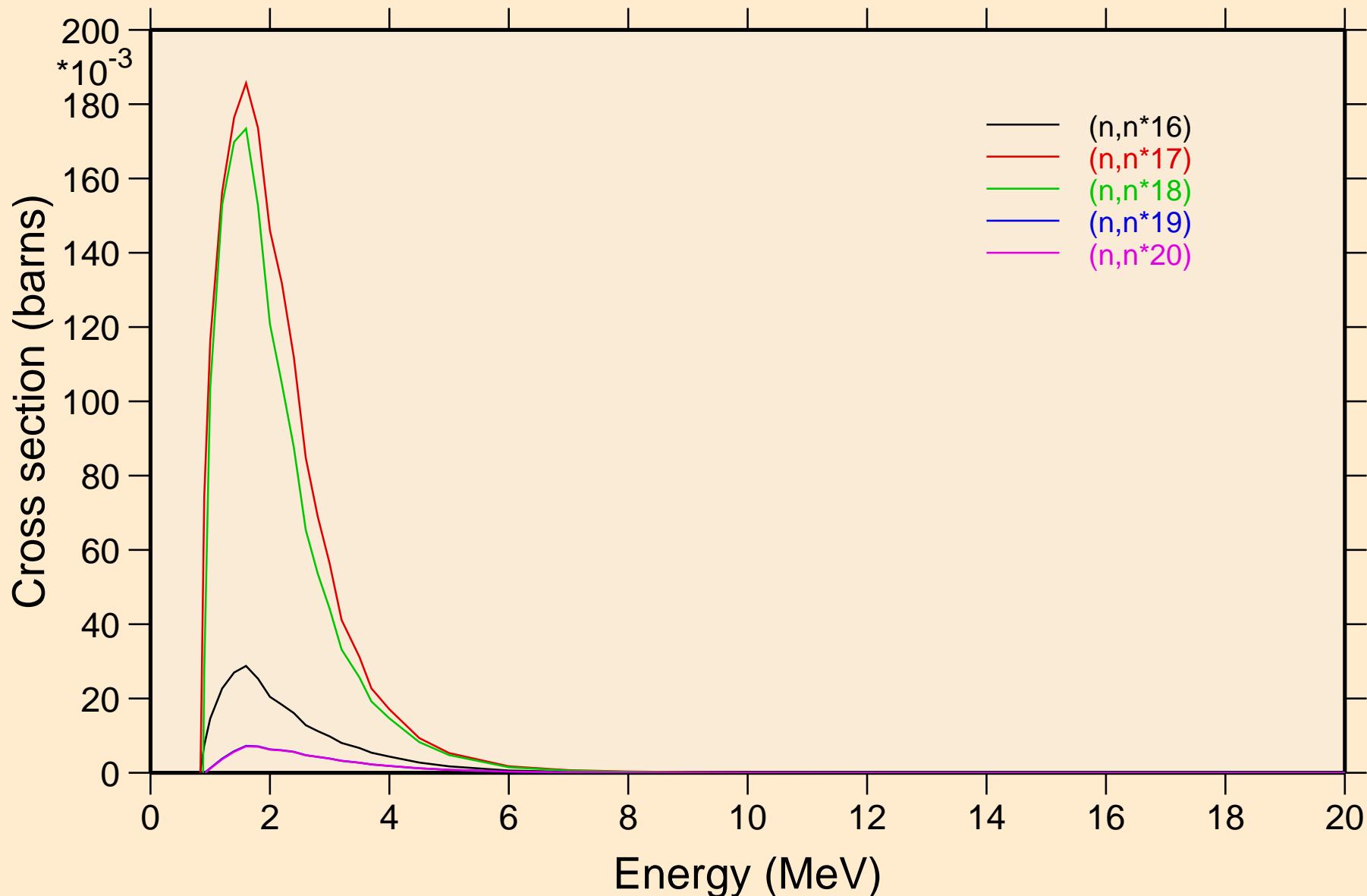
ADVANCE CALCULATIONS

Inelastic levels



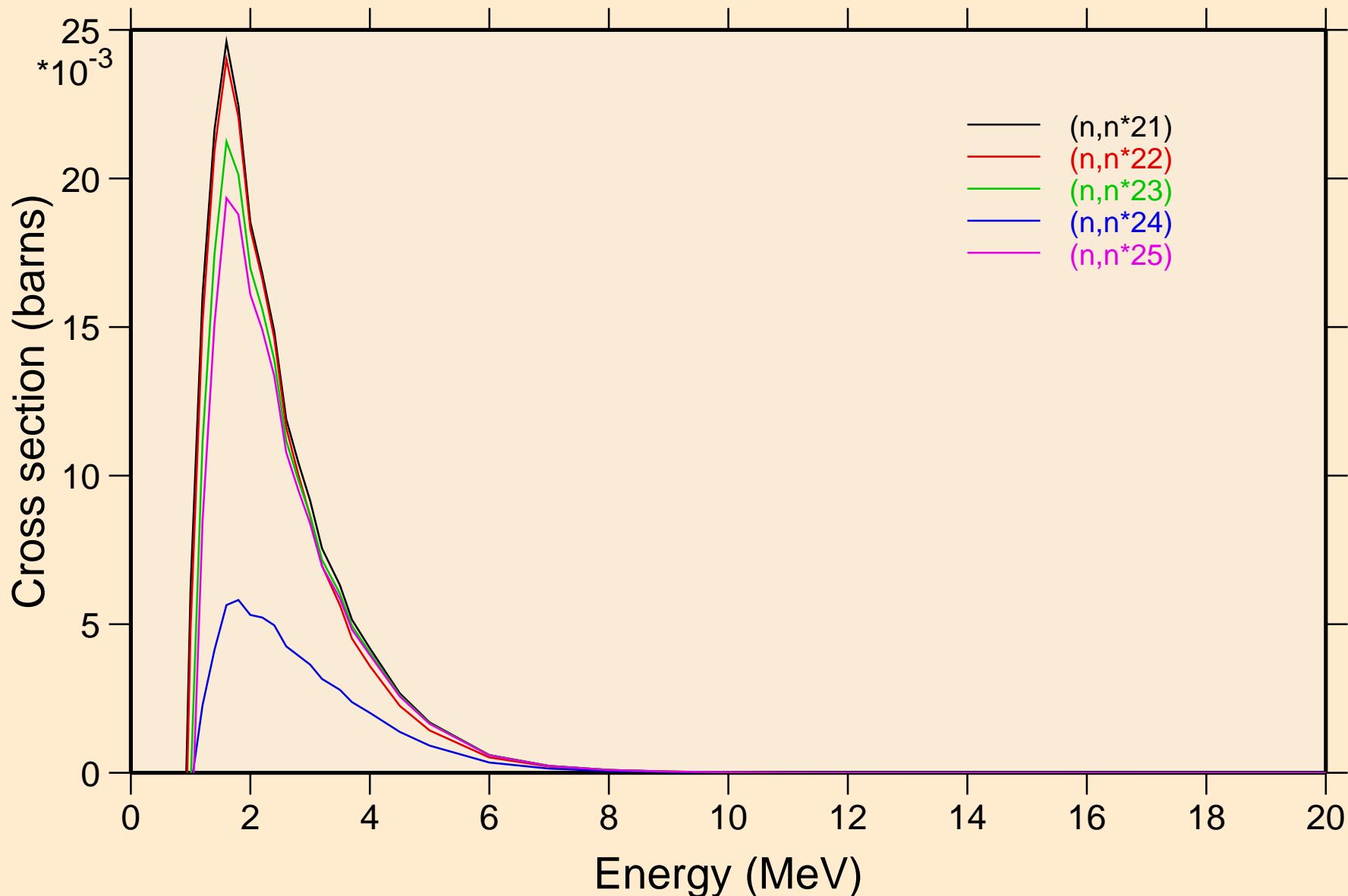
ADVANCE CALCULATIONS

Inelastic levels



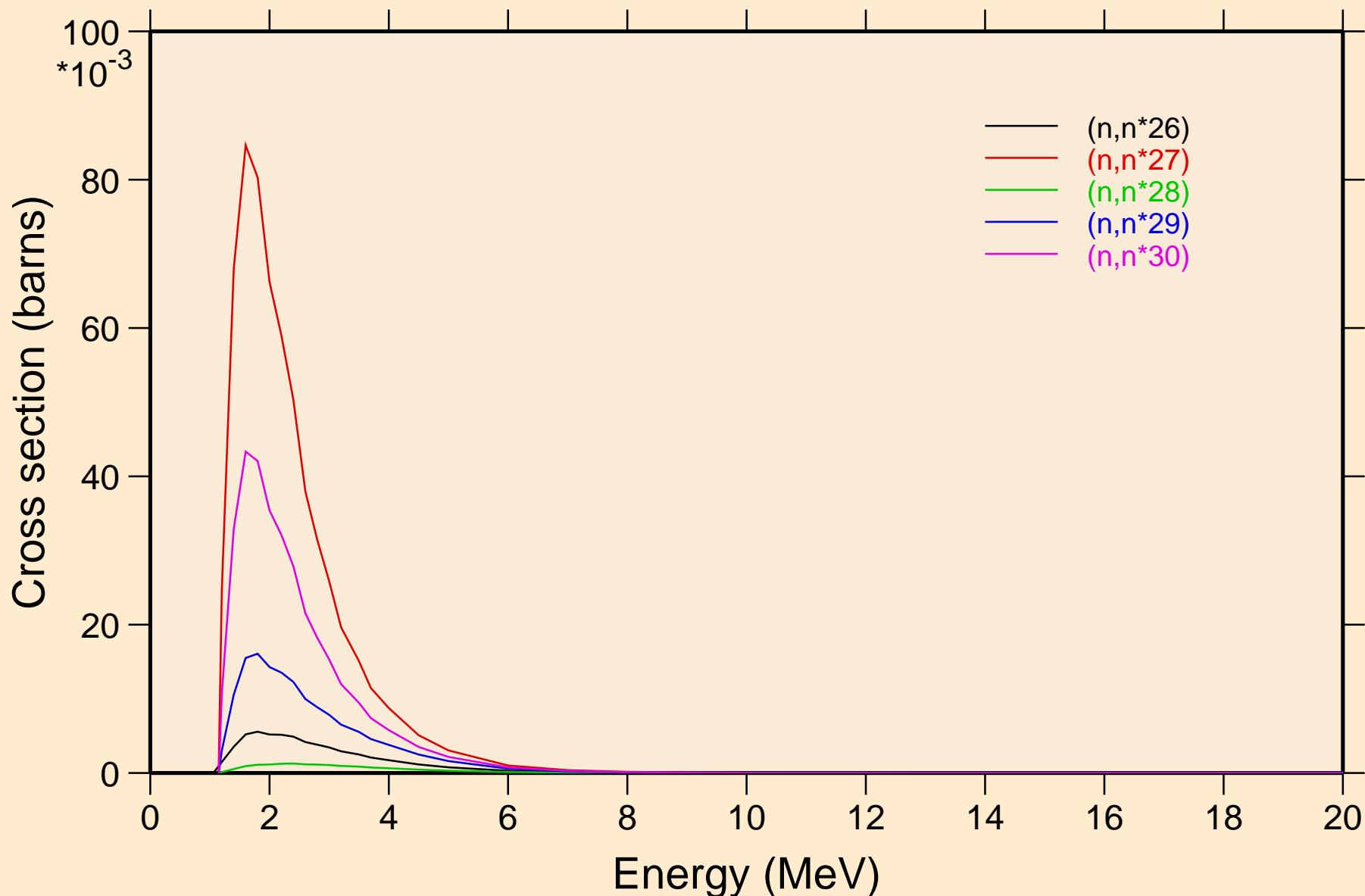
ADVANCE CALCULATIONS

Inelastic levels



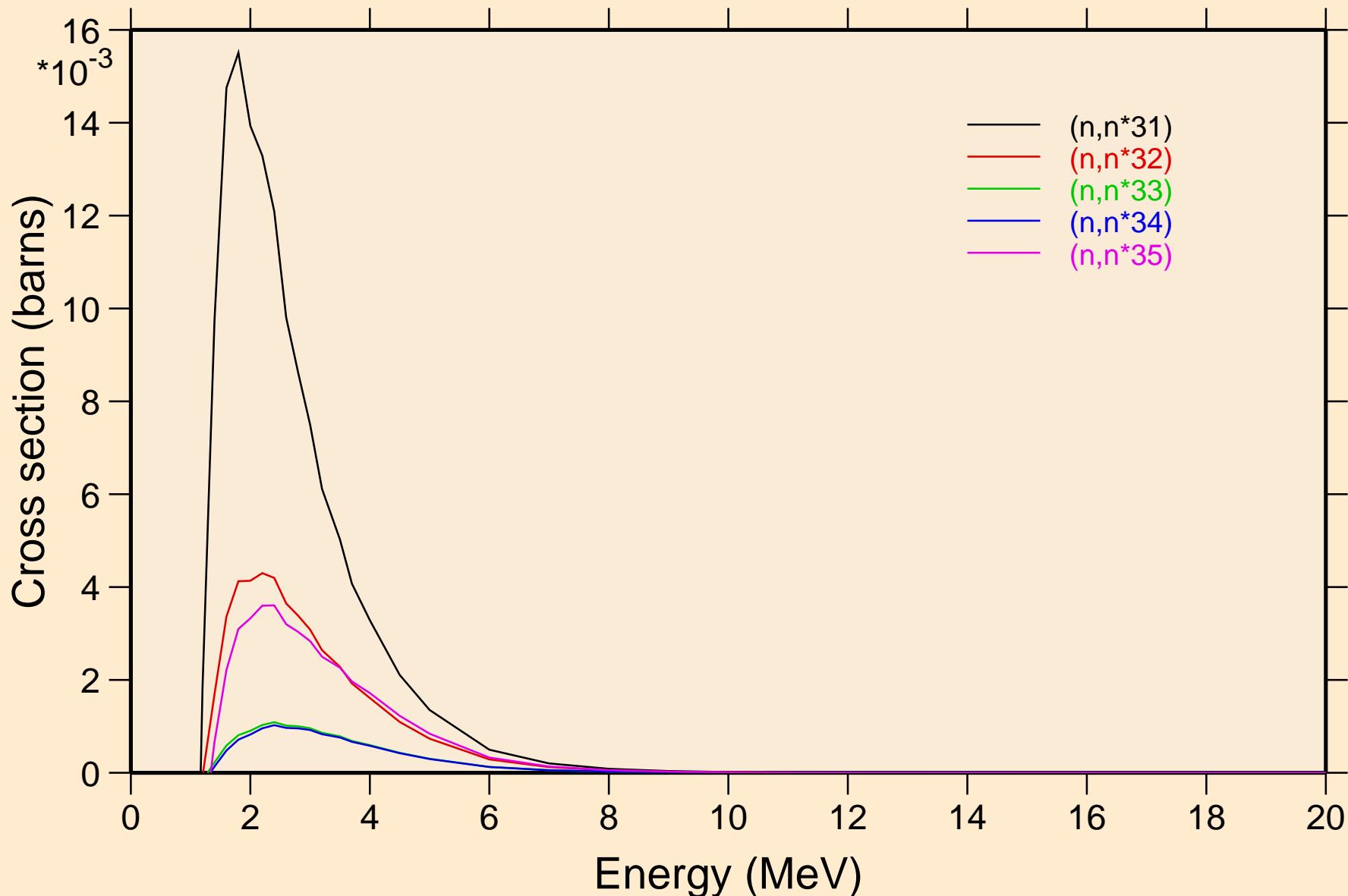
ADVANCE CALCULATIONS

Inelastic levels



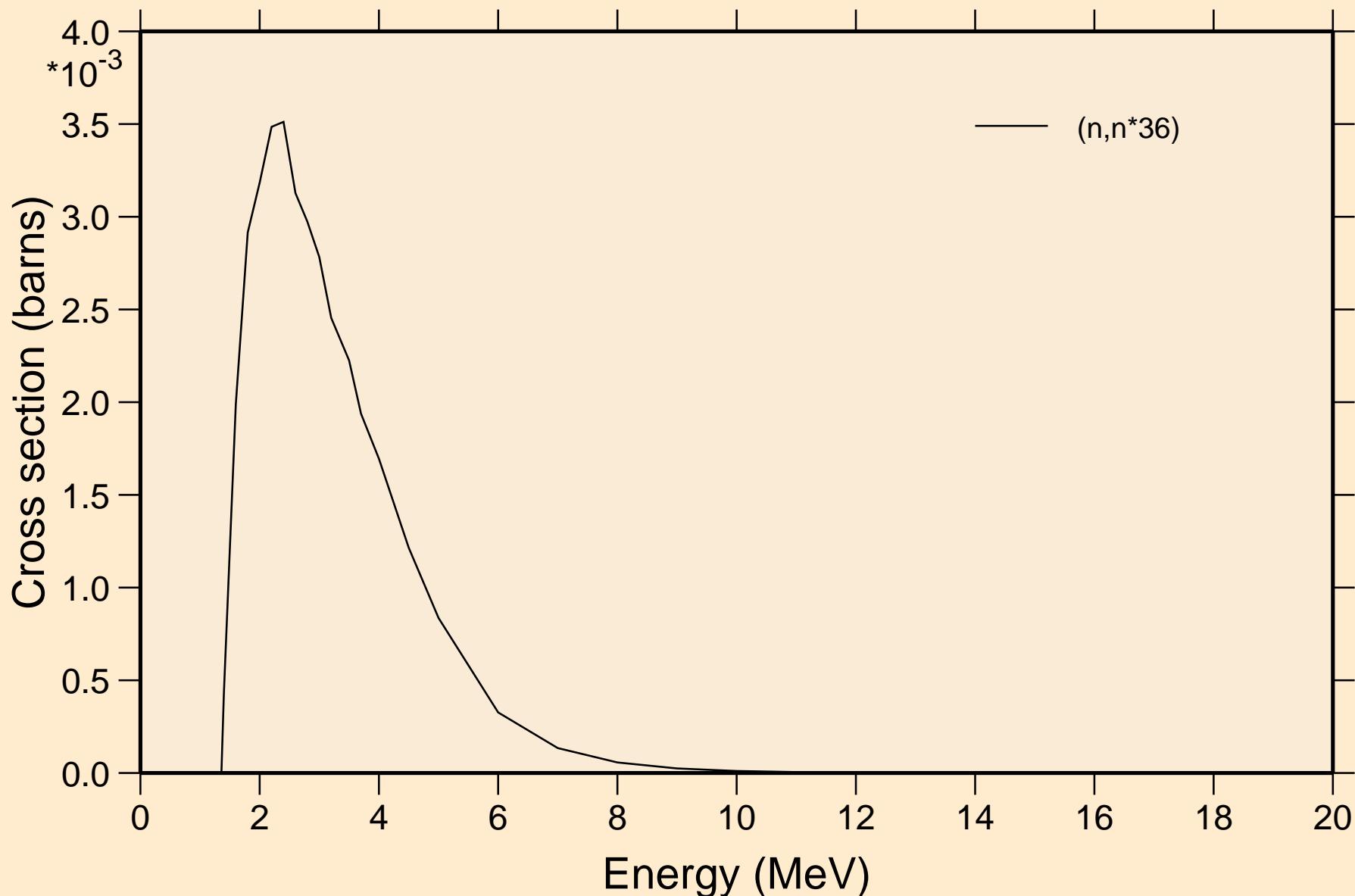
ADVANCE CALCULATIONS

Inelastic levels



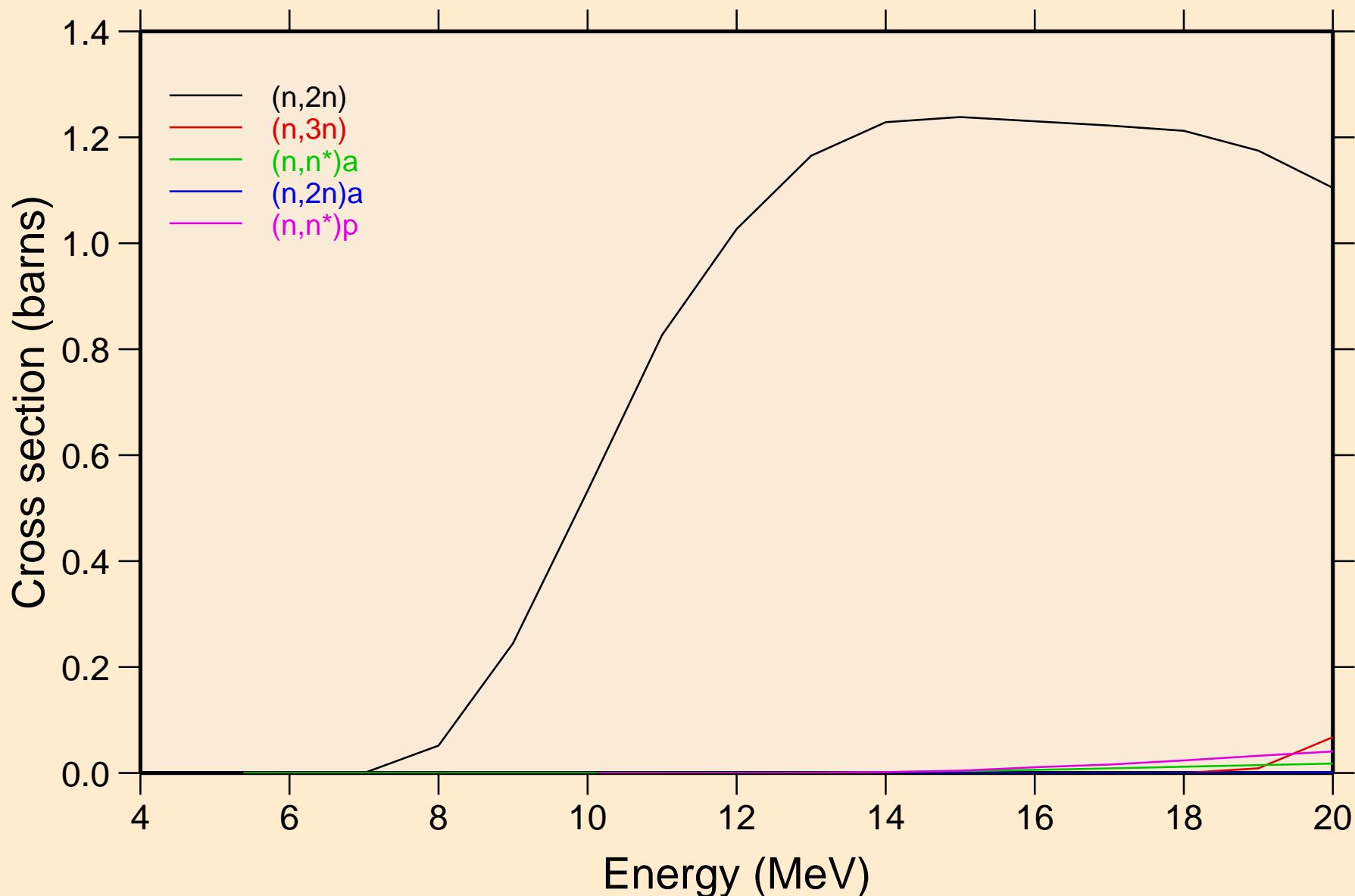
ADVANCE CALCULATIONS

Inelastic levels



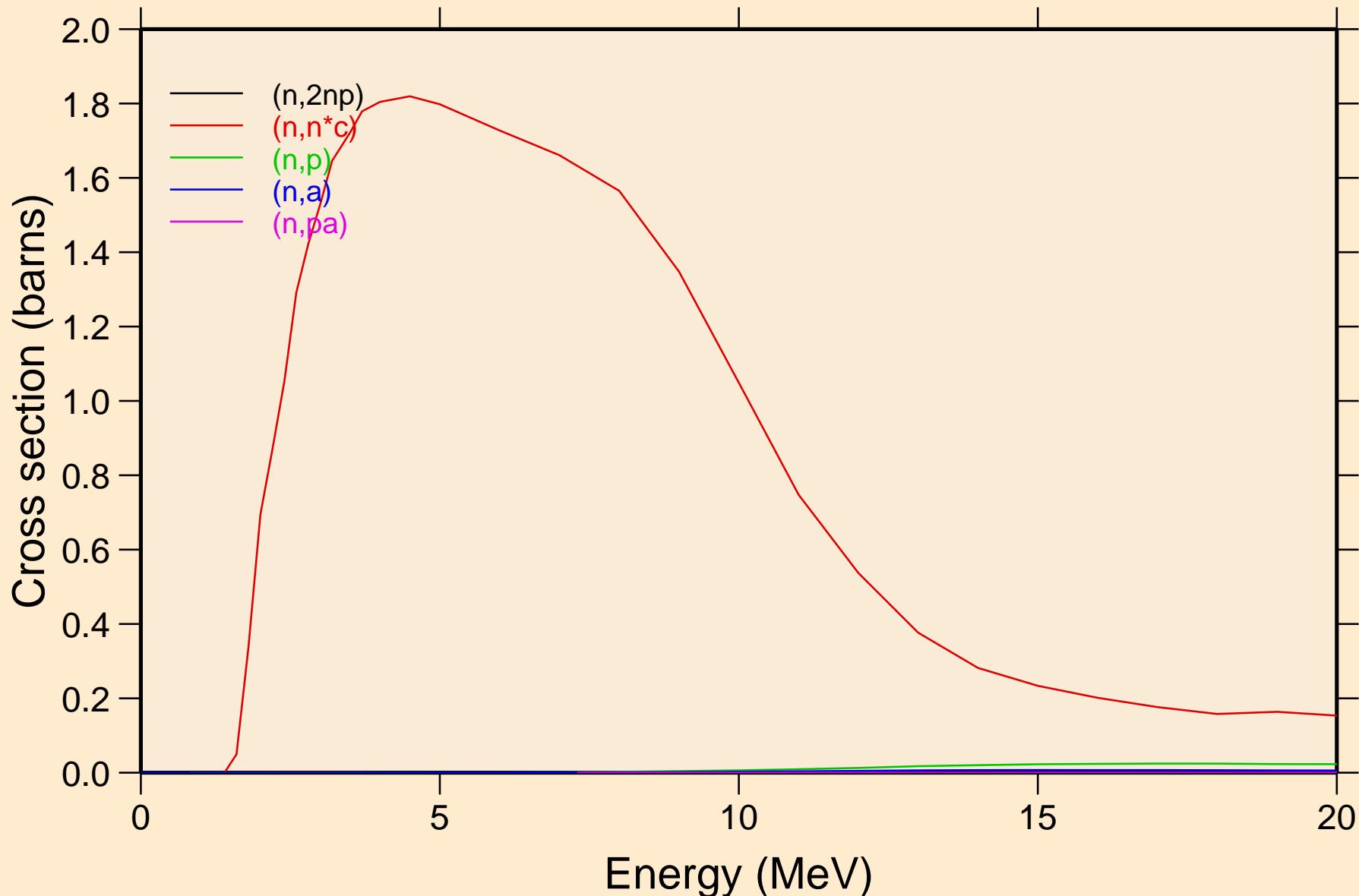
ADVANCE CALCULATIONS

Threshold reactions



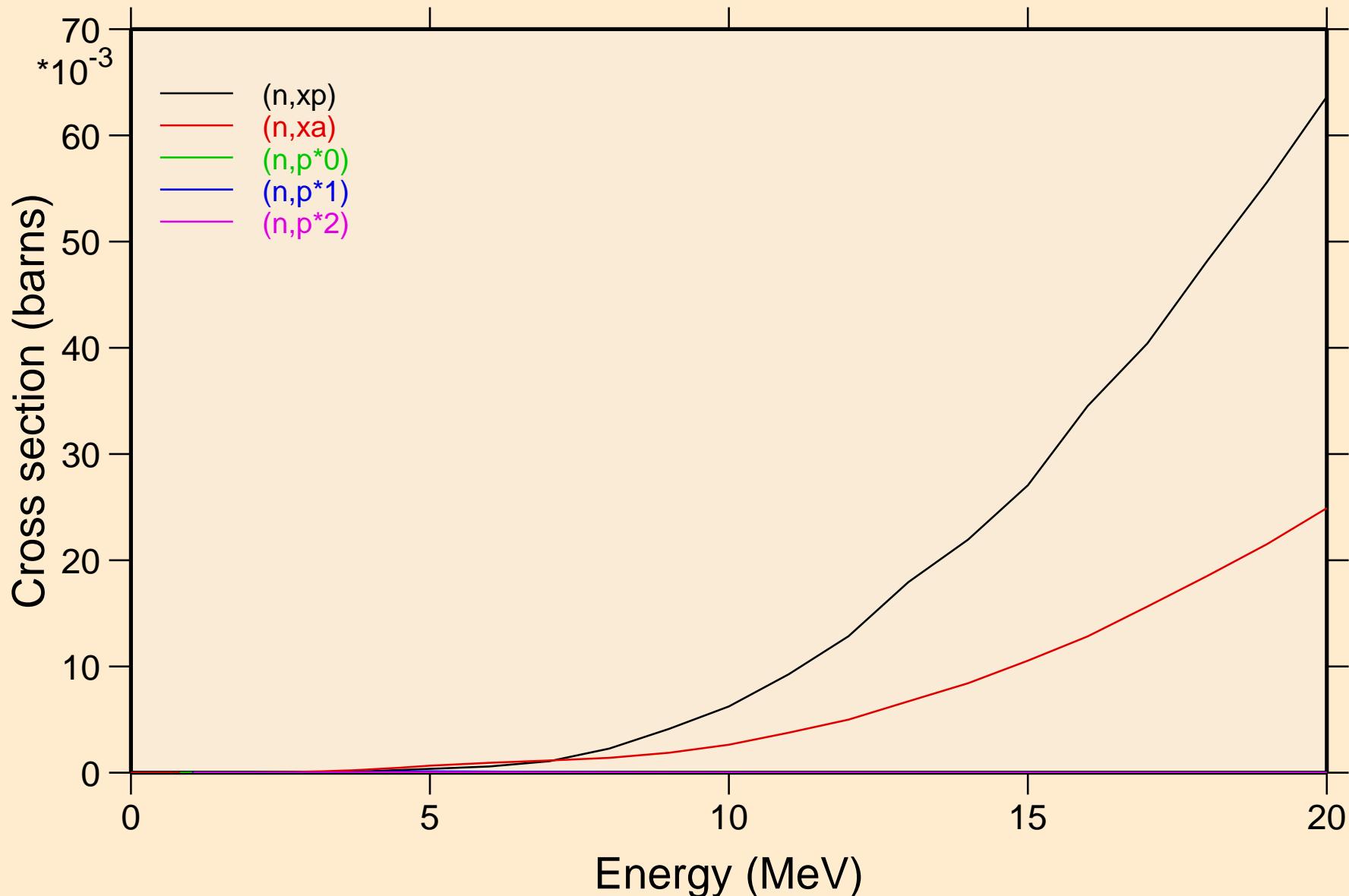
ADVANCE CALCULATIONS

Threshold reactions



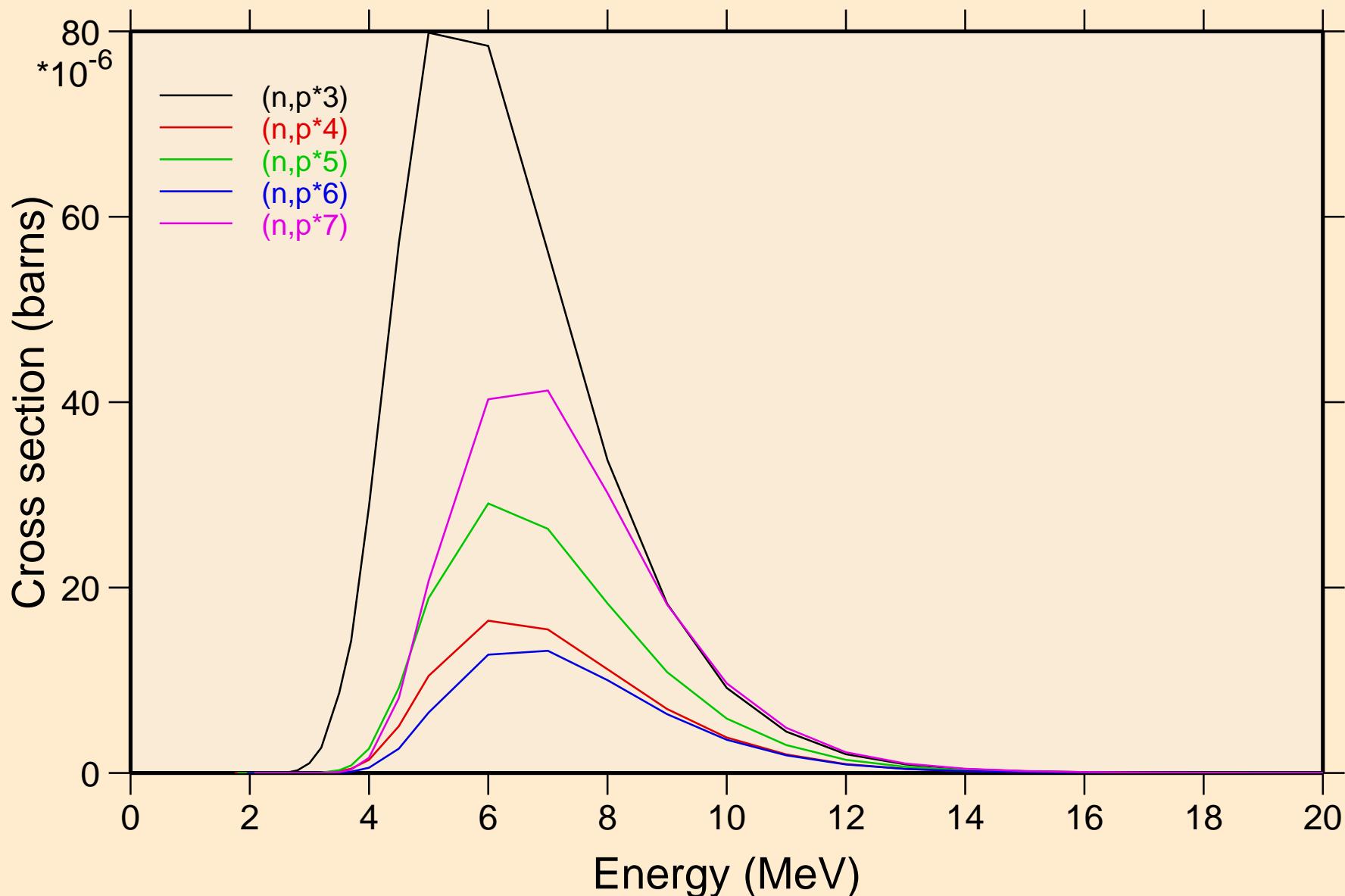
ADVANCE CALCULATIONS

Threshold reactions



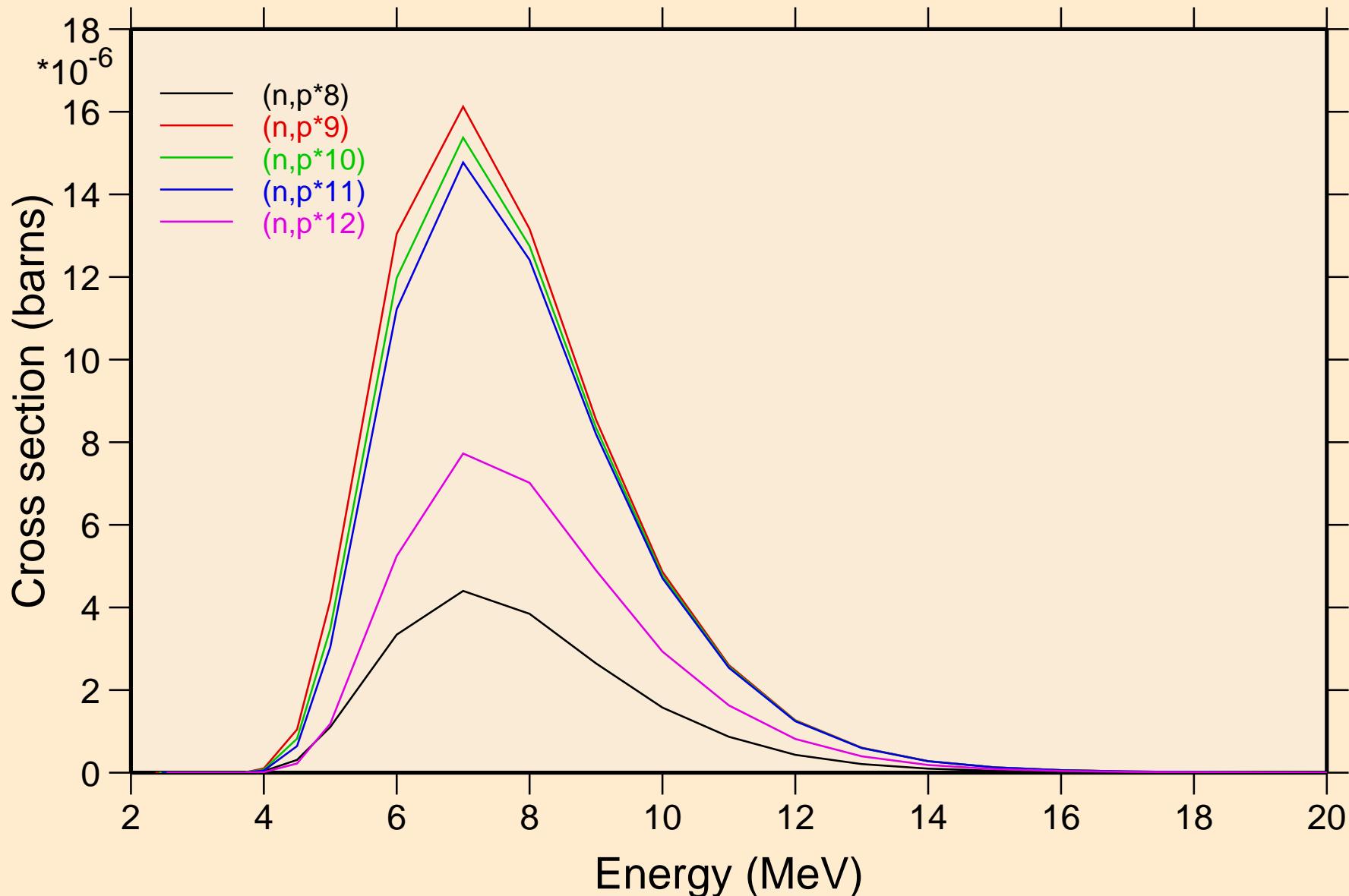
ADVANCE CALCULATIONS

Threshold reactions



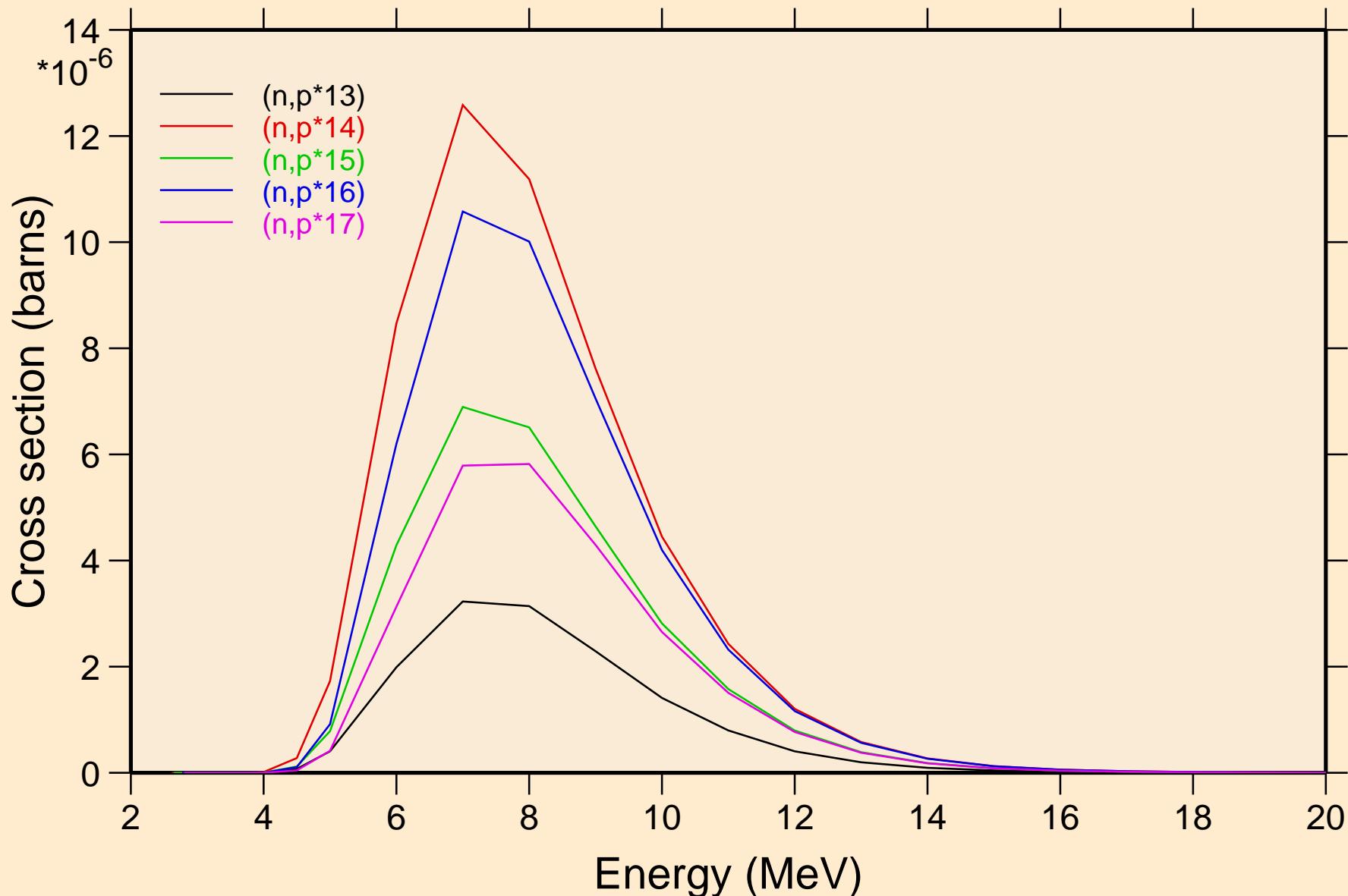
ADVANCE CALCULATIONS

Threshold reactions



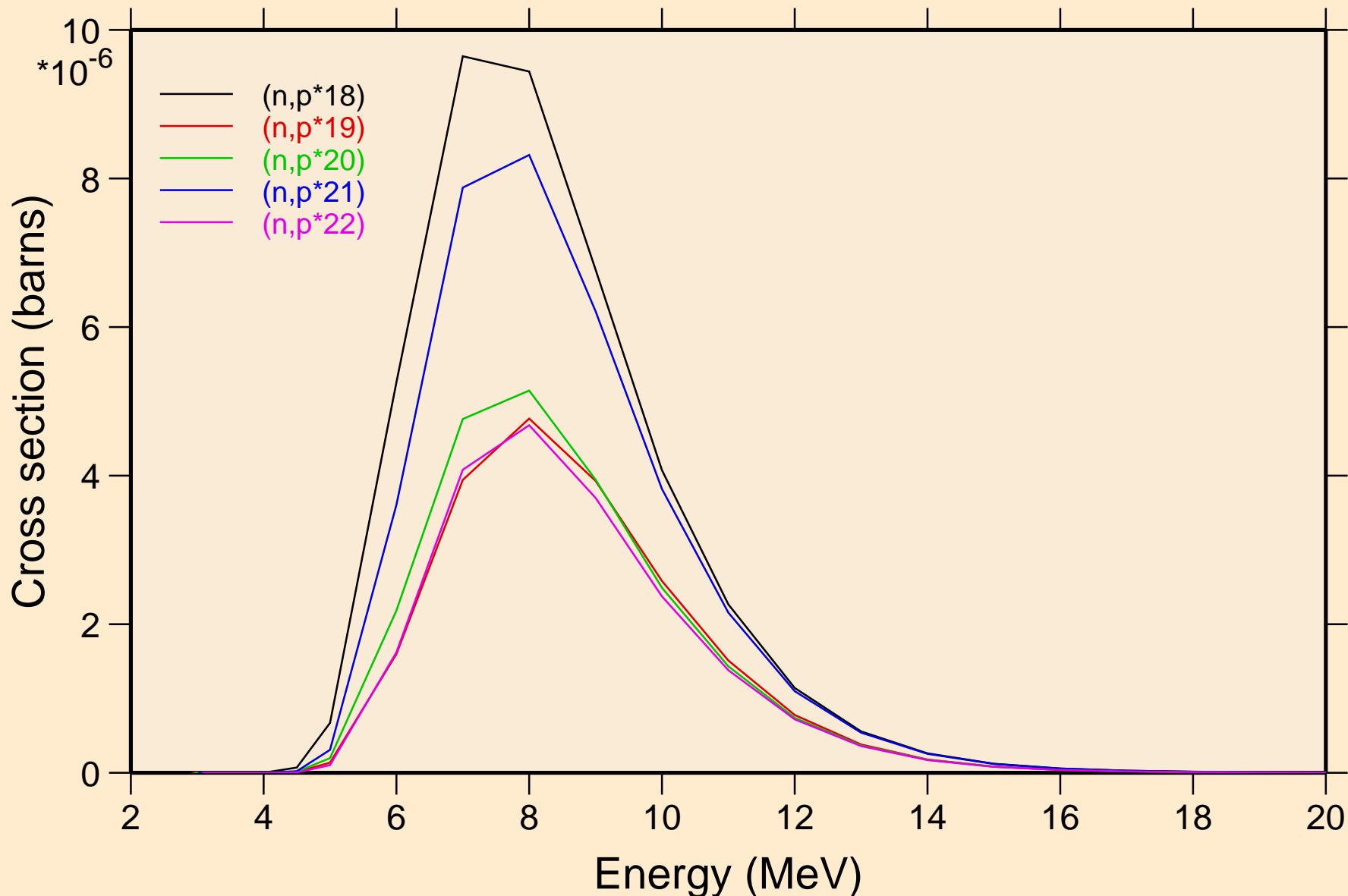
ADVANCE CALCULATIONS

Threshold reactions



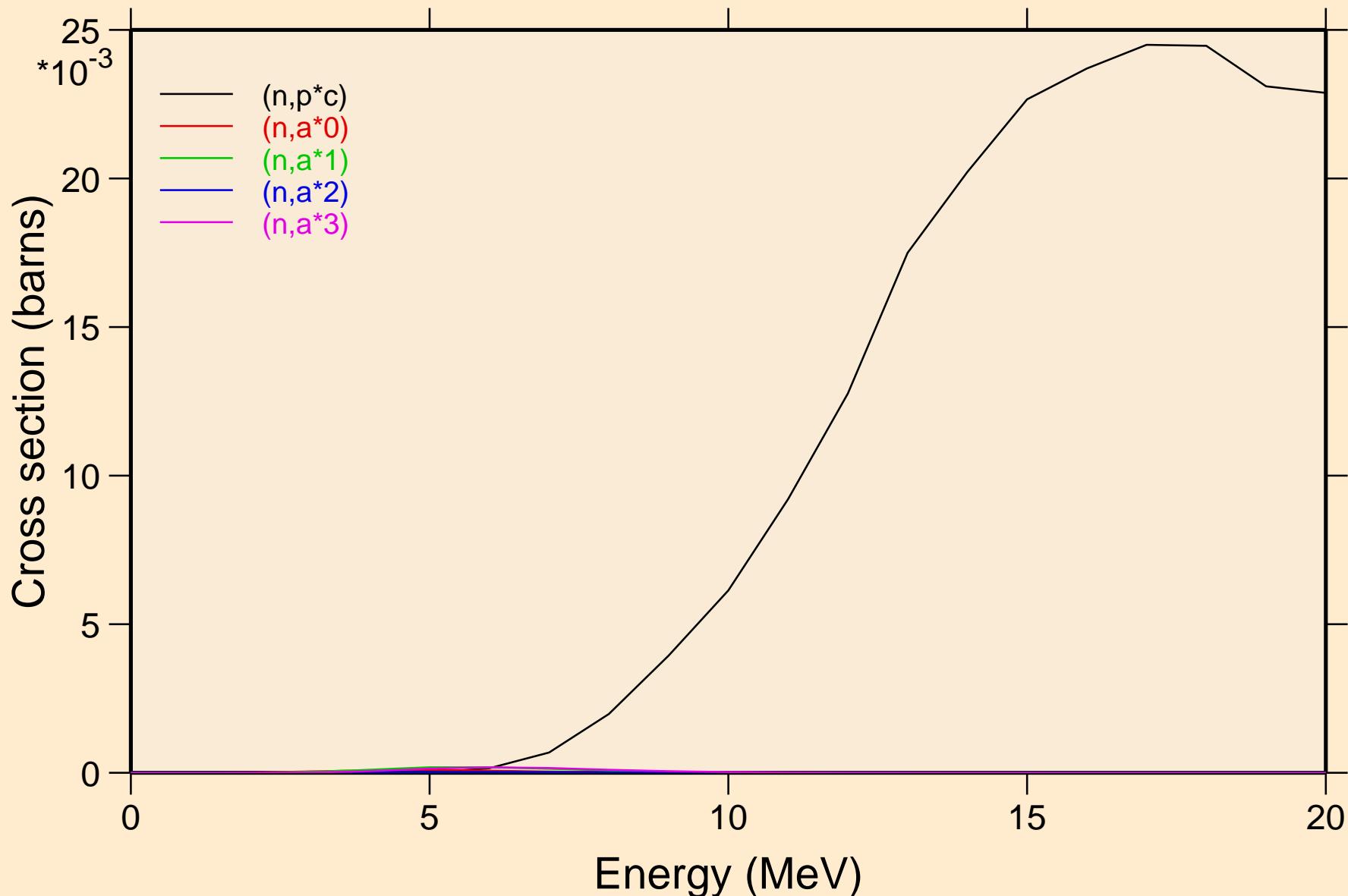
ADVANCE CALCULATIONS

Threshold reactions



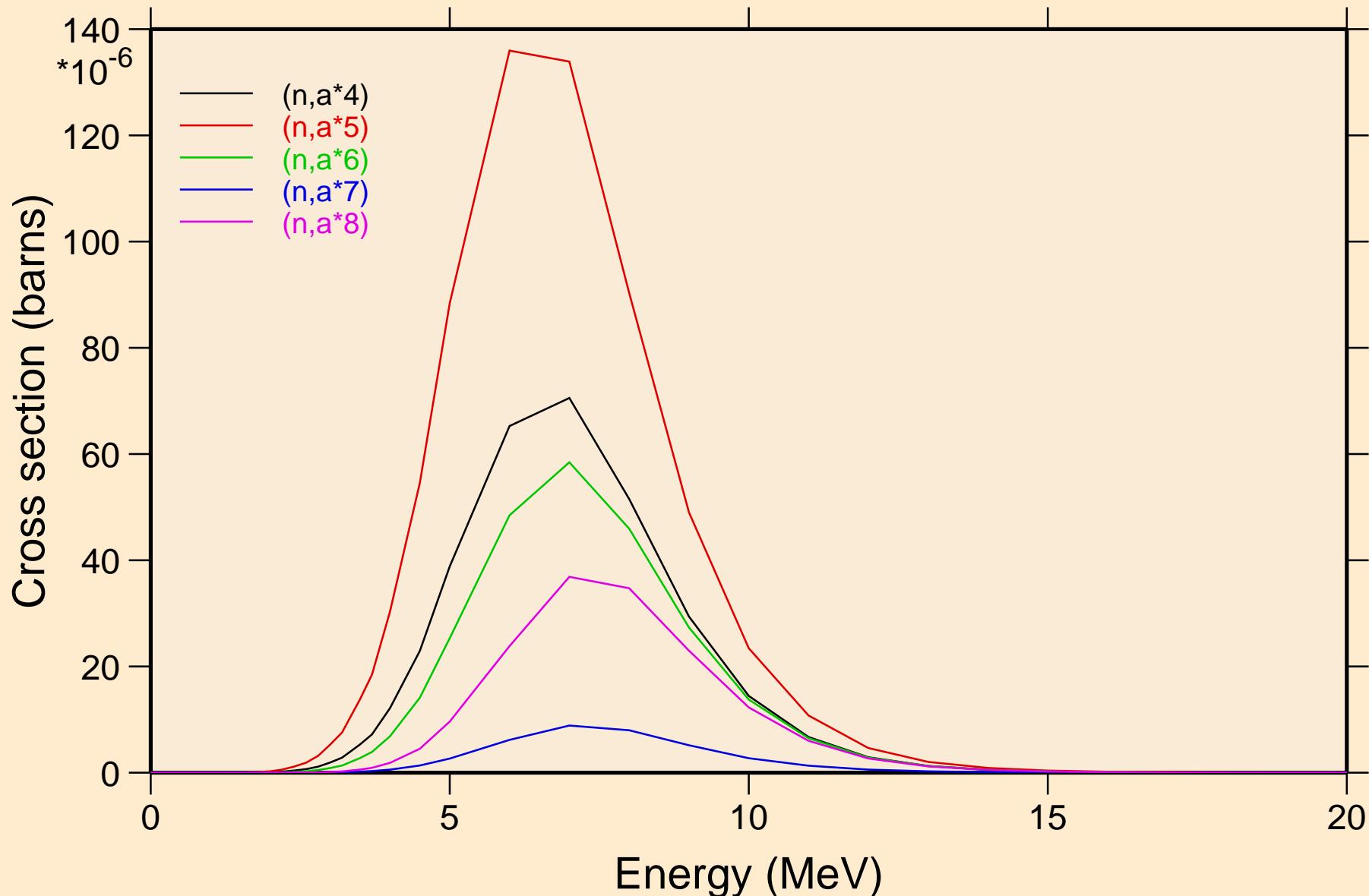
ADVANCE CALCULATIONS

Threshold reactions



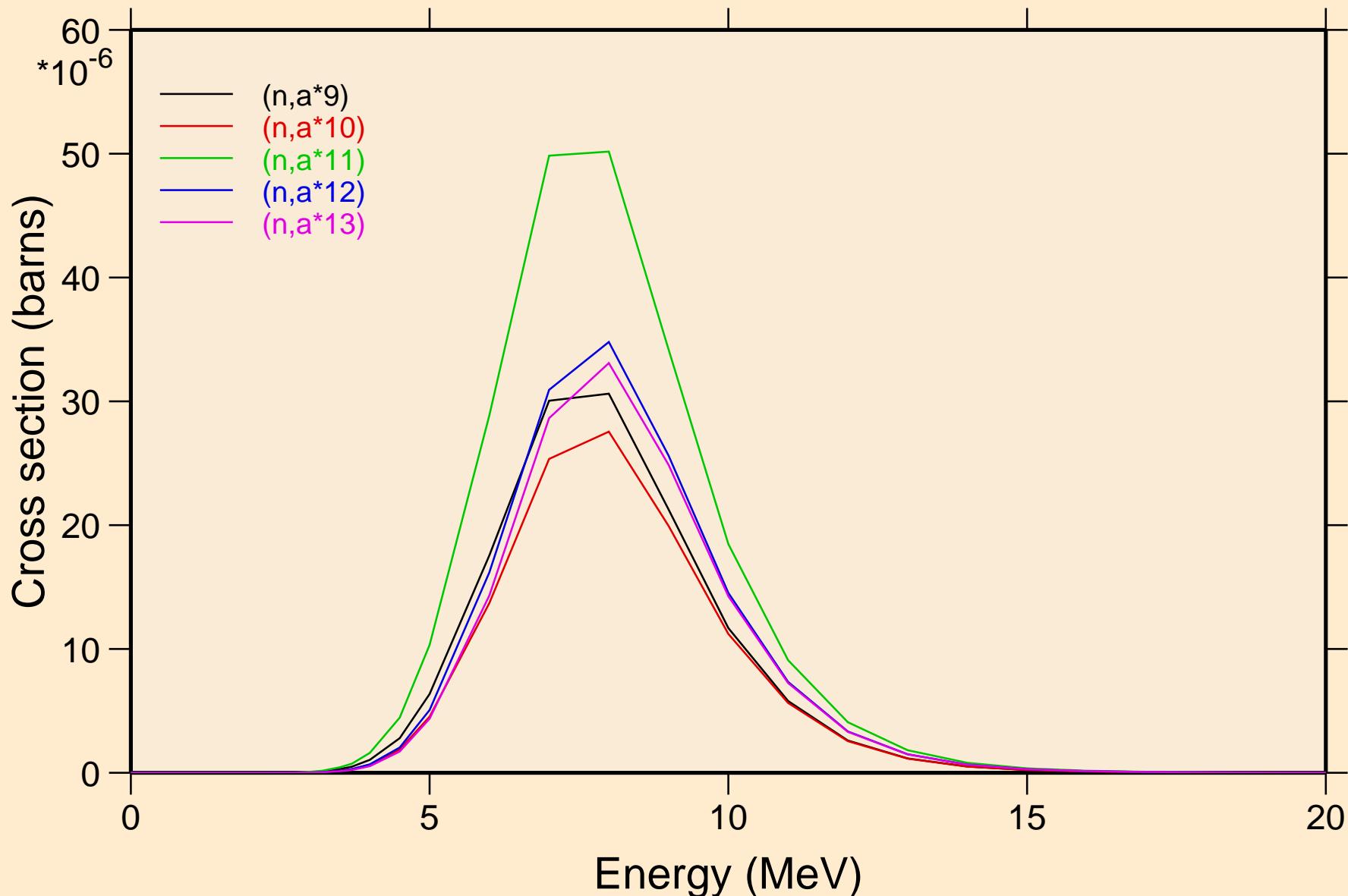
ADVANCE CALCULATIONS

Threshold reactions



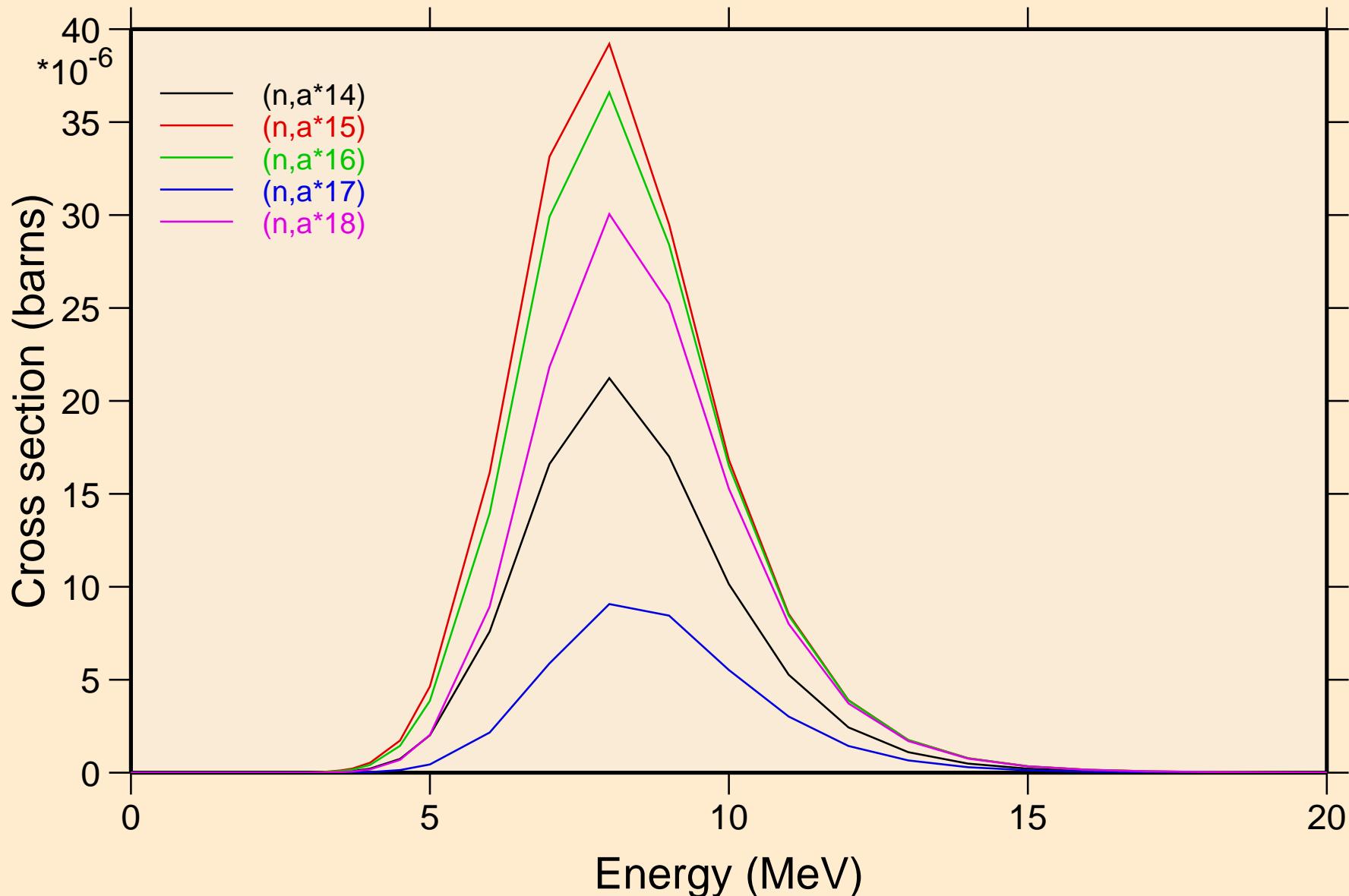
ADVANCE CALCULATIONS

Threshold reactions



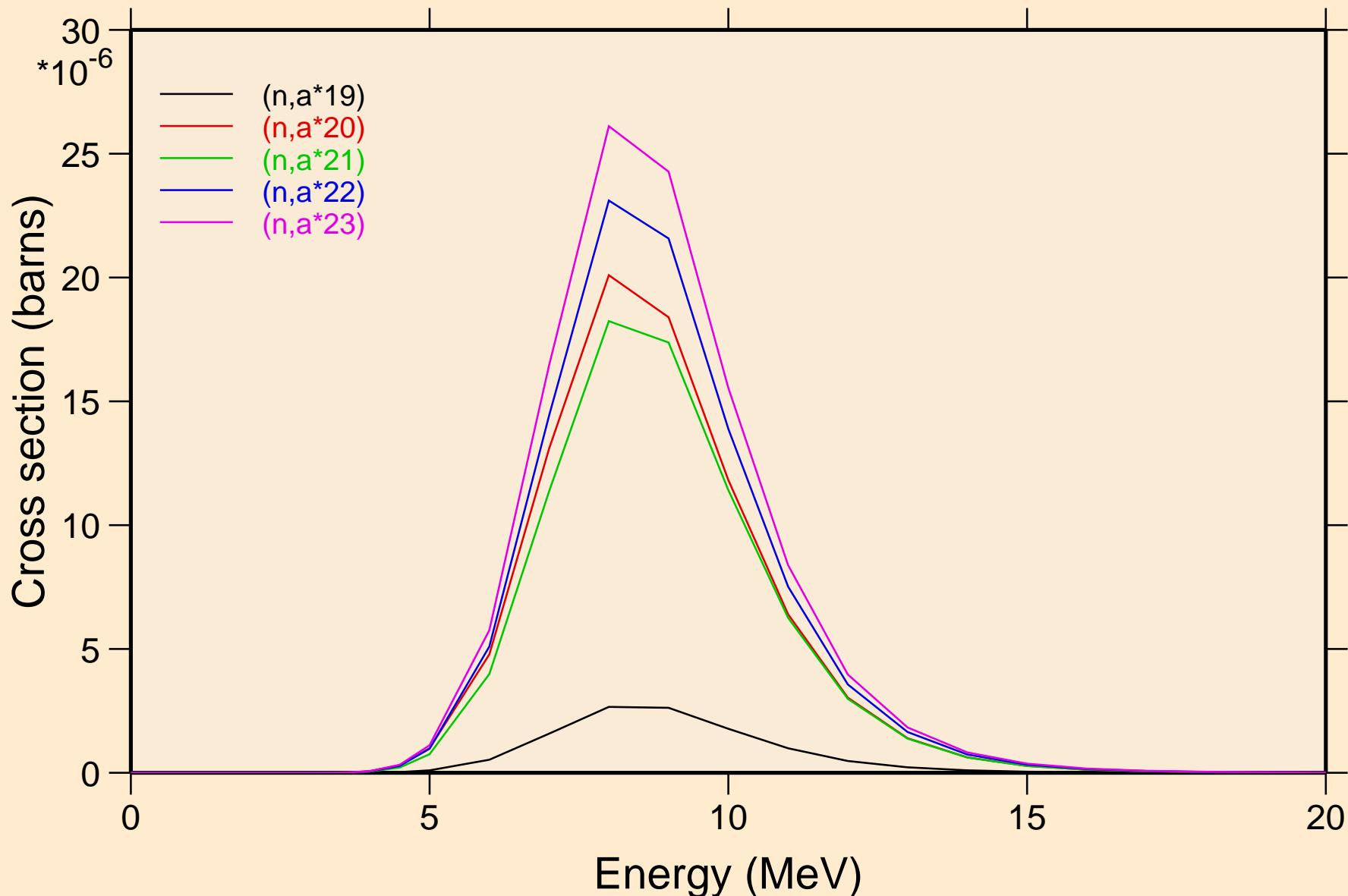
ADVANCE CALCULATIONS

Threshold reactions



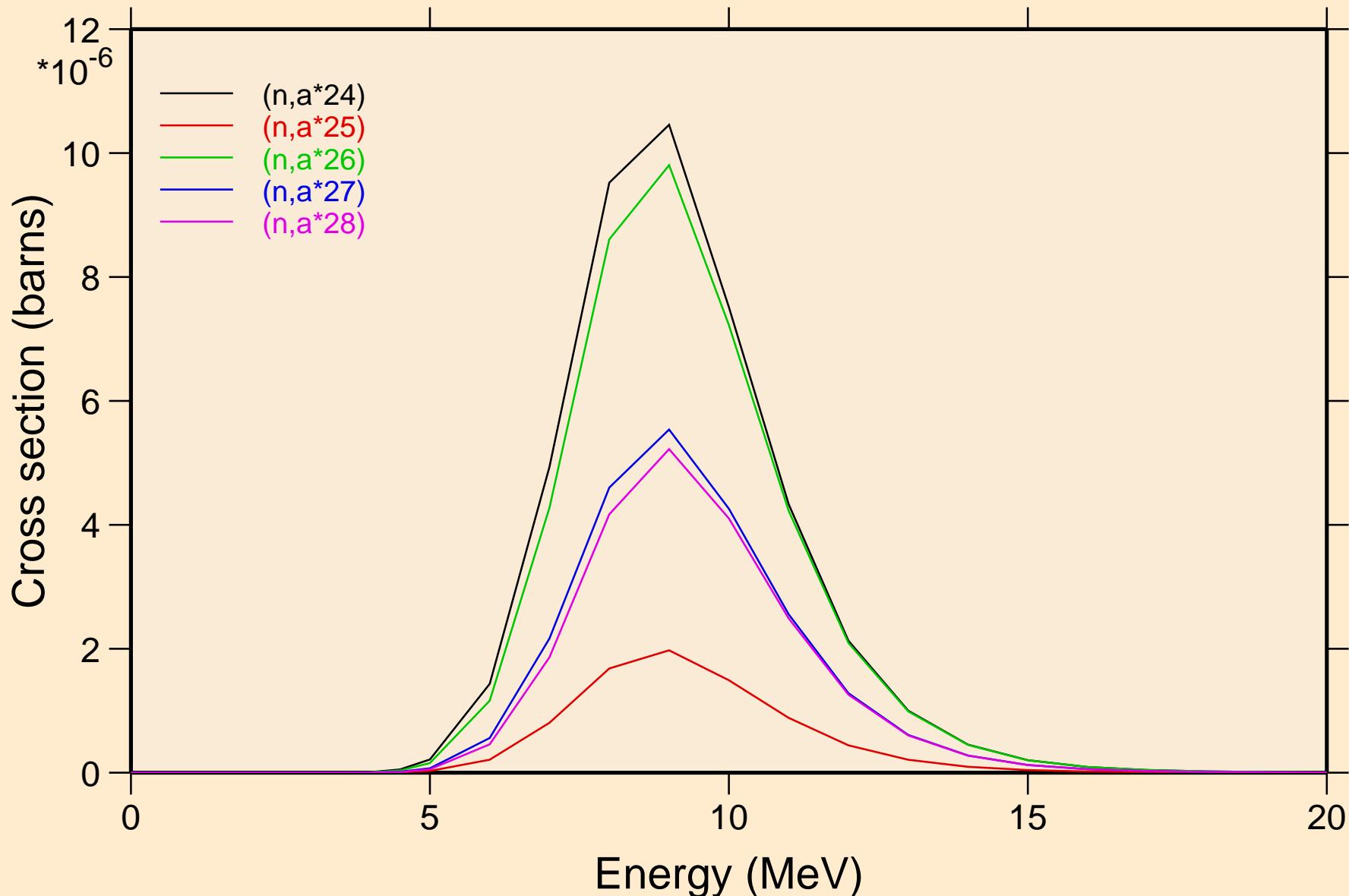
ADVANCE CALCULATIONS

Threshold reactions



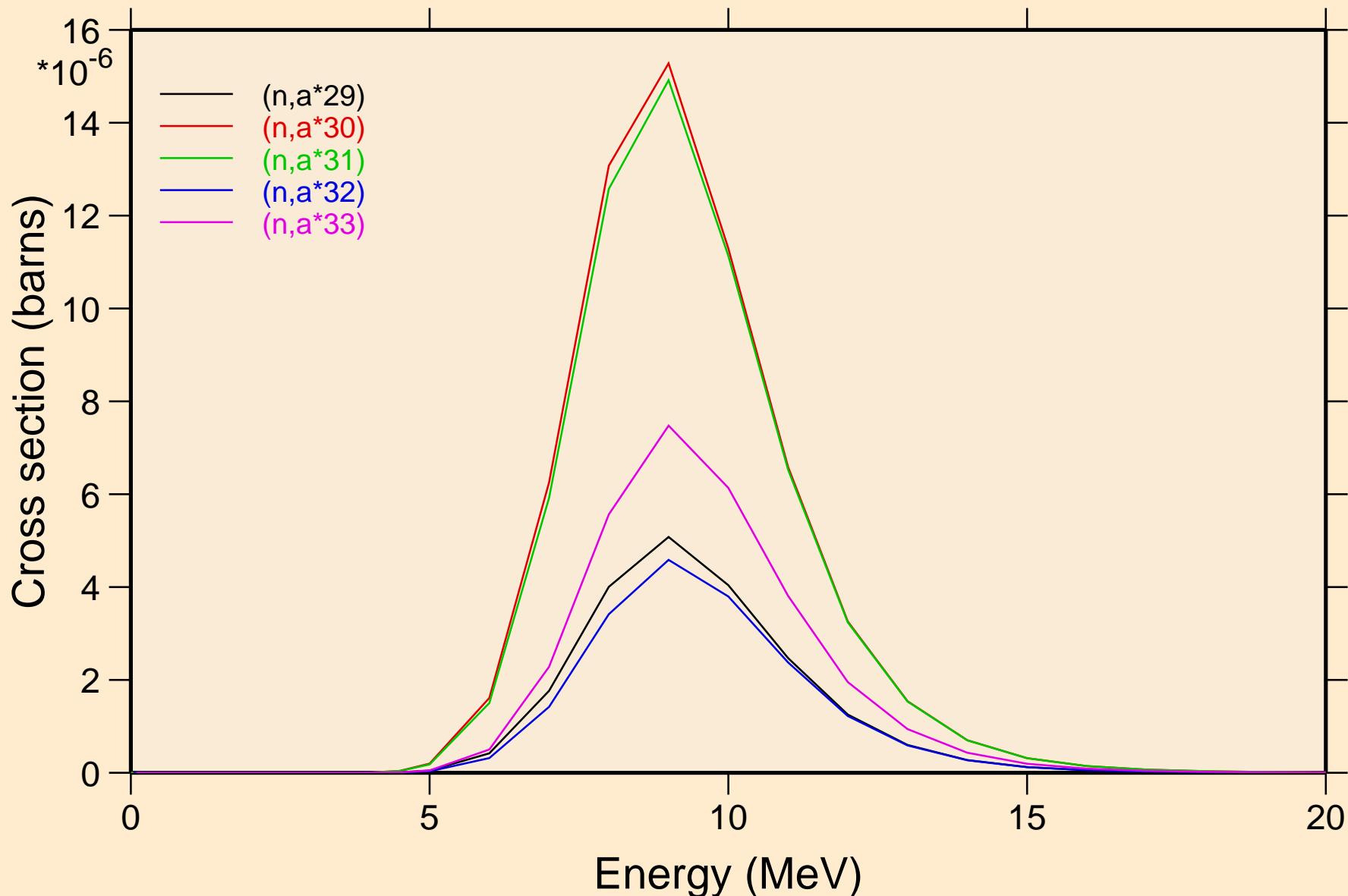
ADVANCE CALCULATIONS

Threshold reactions



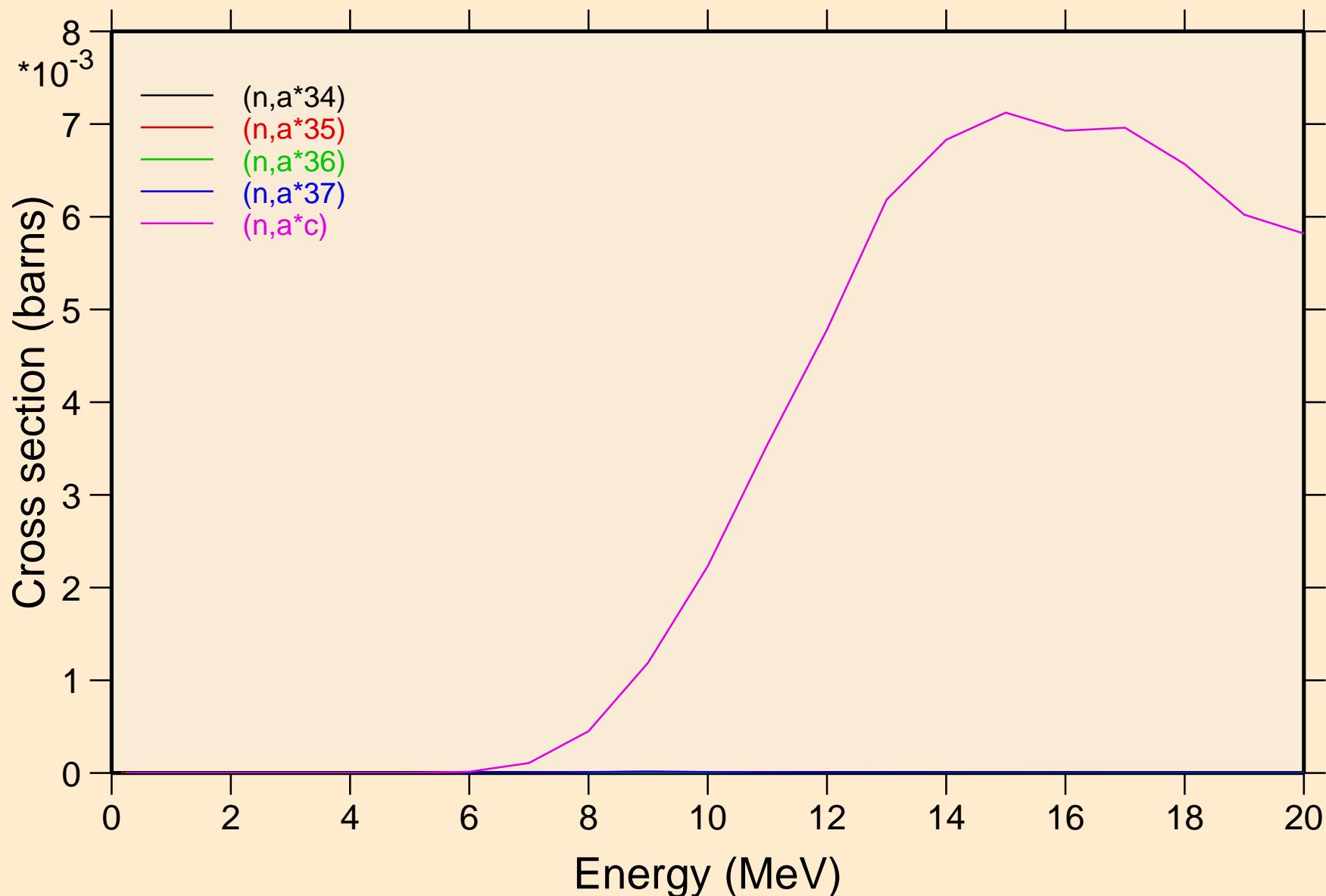
ADVANCE CALCULATIONS

Threshold reactions



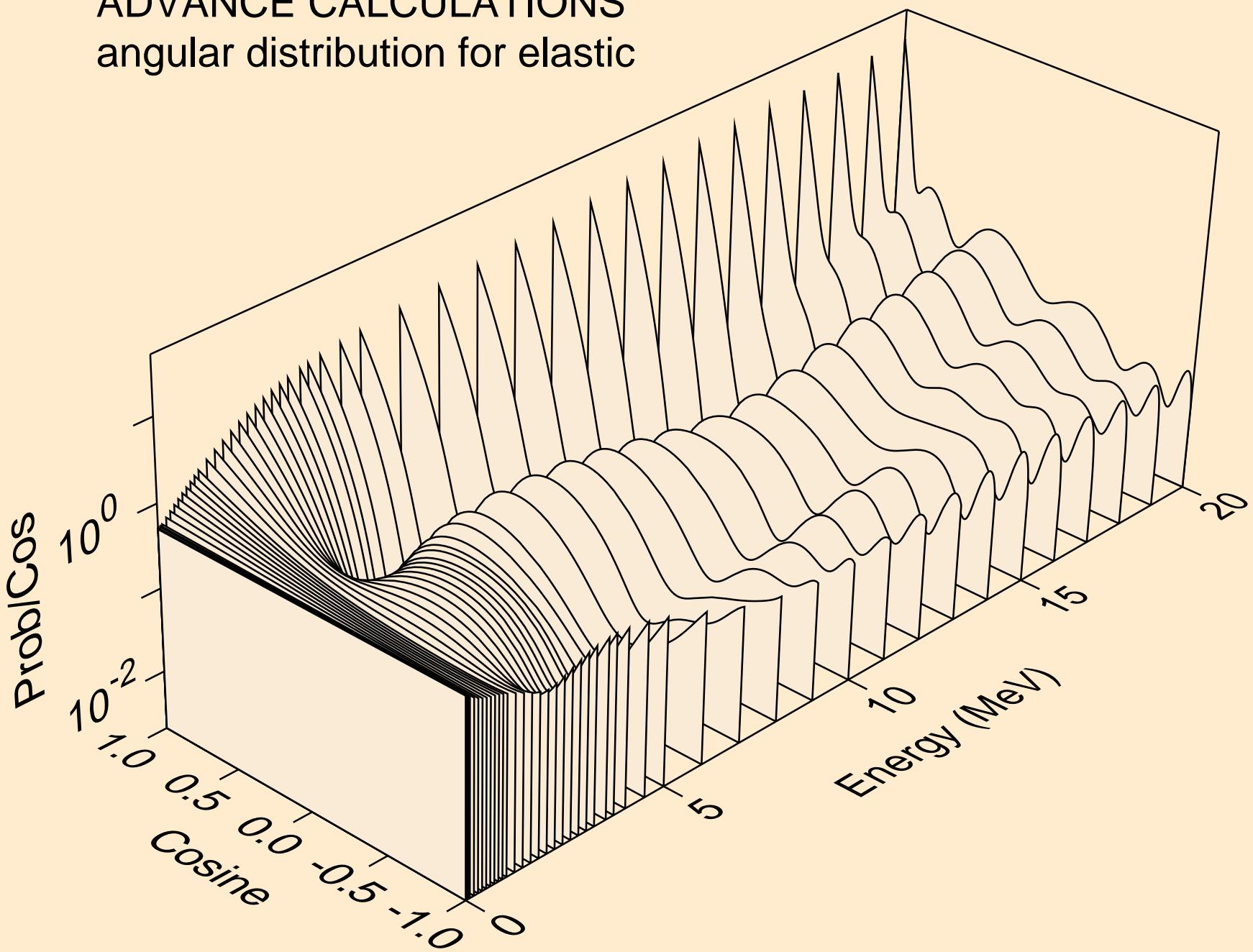
ADVANCE CALCULATIONS

Threshold reactions



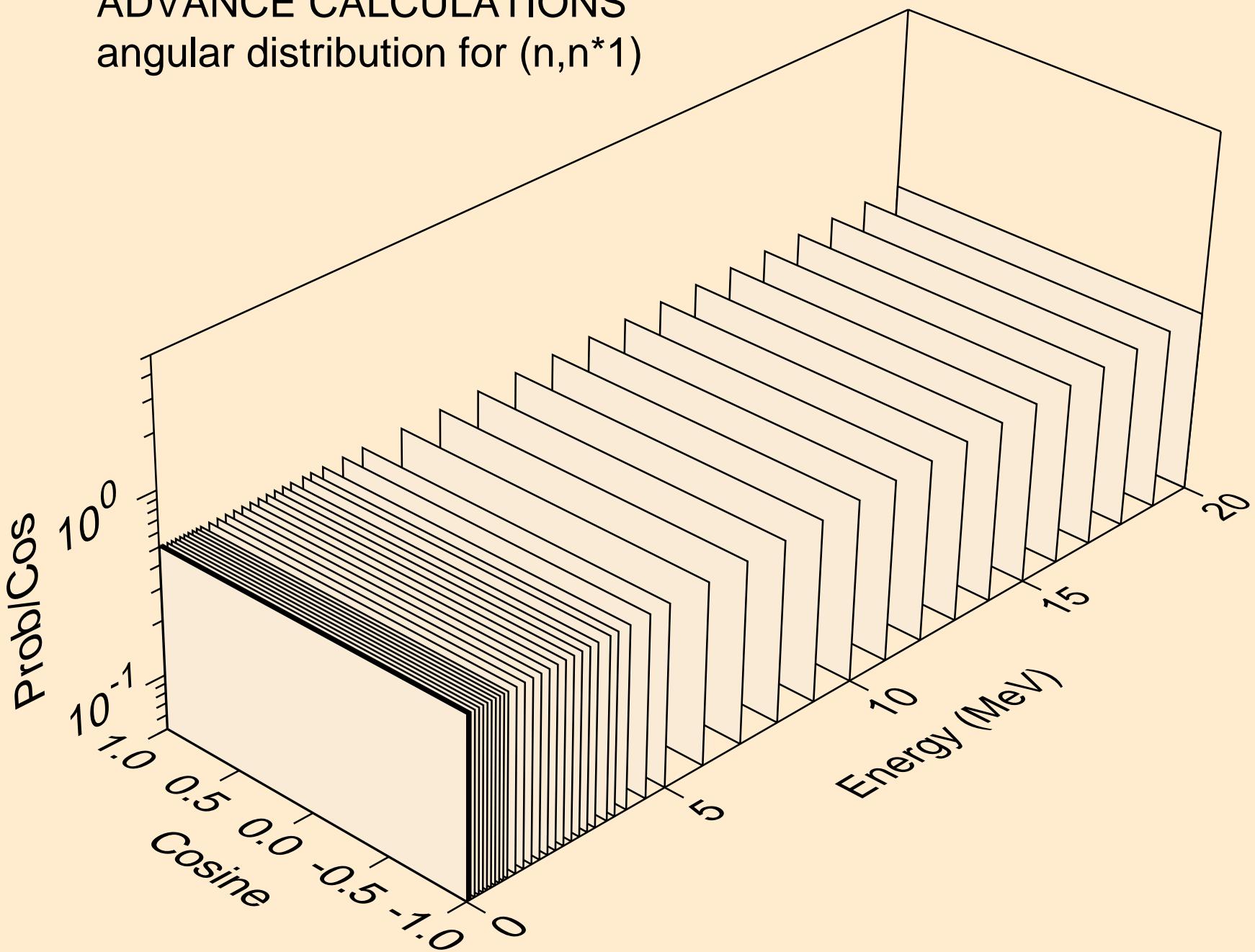
ADVANCE CALCULATIONS

angular distribution for elastic



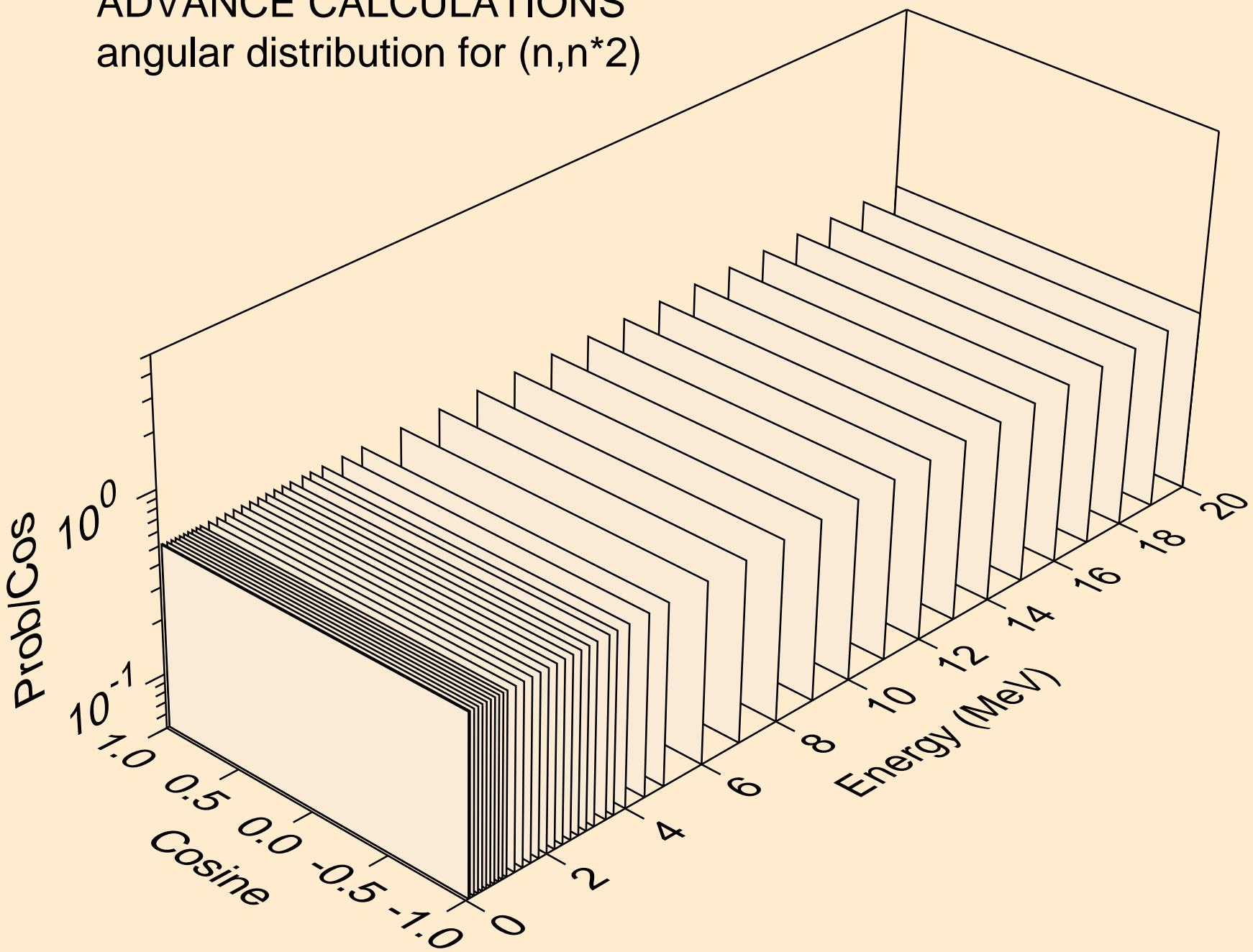
ADVANCE CALCULATIONS

angular distribution for (n,n^*)



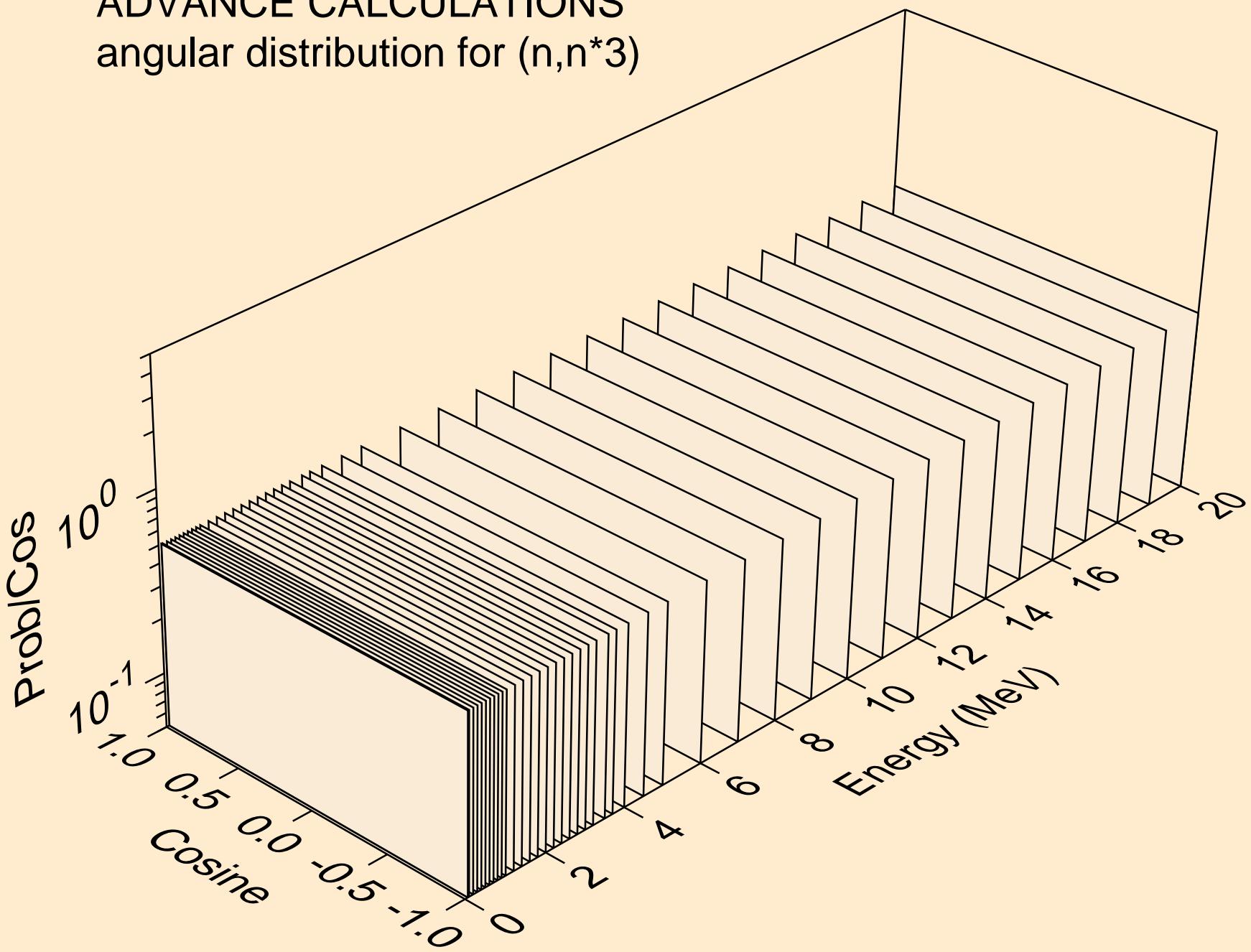
ADVANCE CALCULATIONS

angular distribution for (n, n^*2)



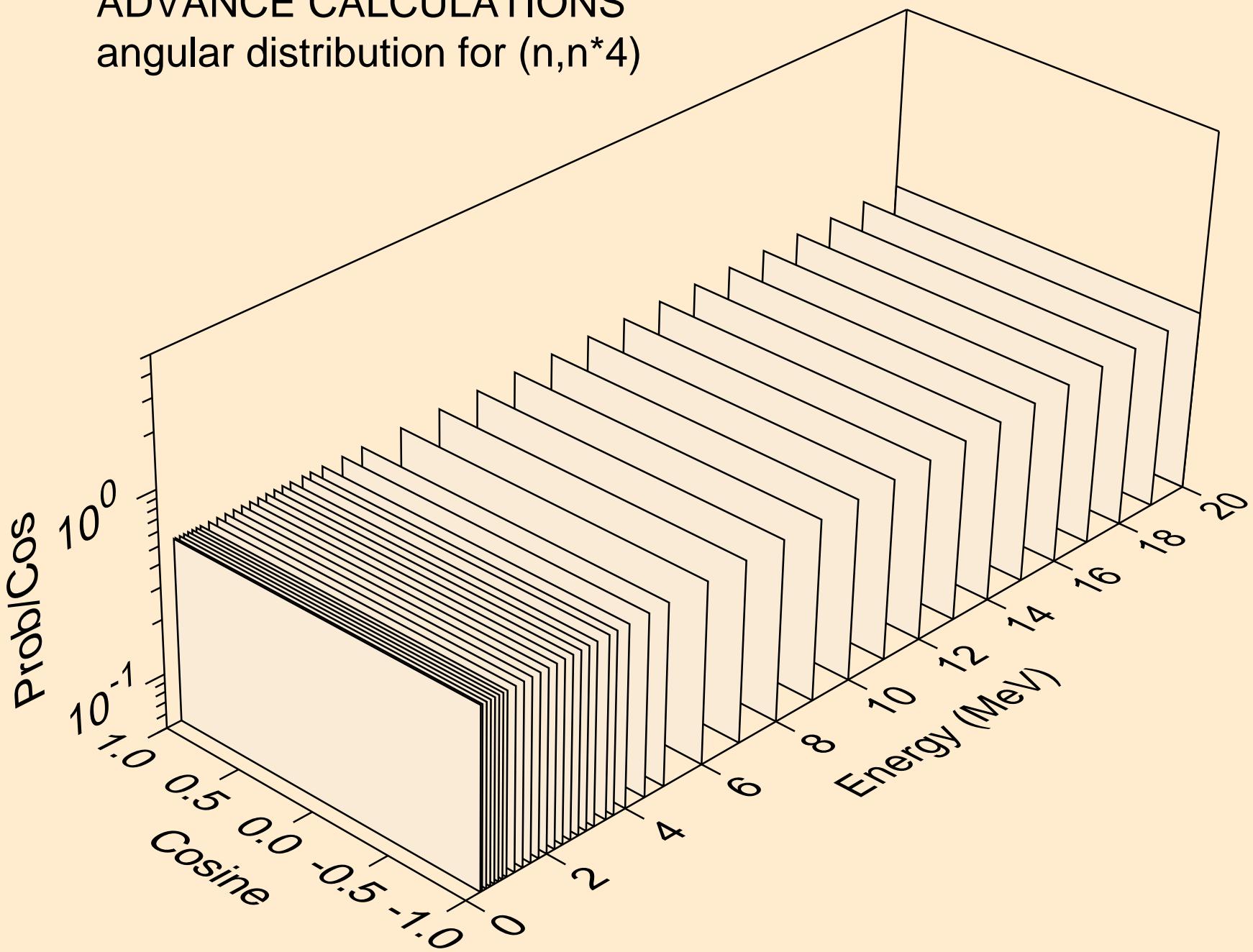
ADVANCE CALCULATIONS

angular distribution for $(n,n^*)^3$



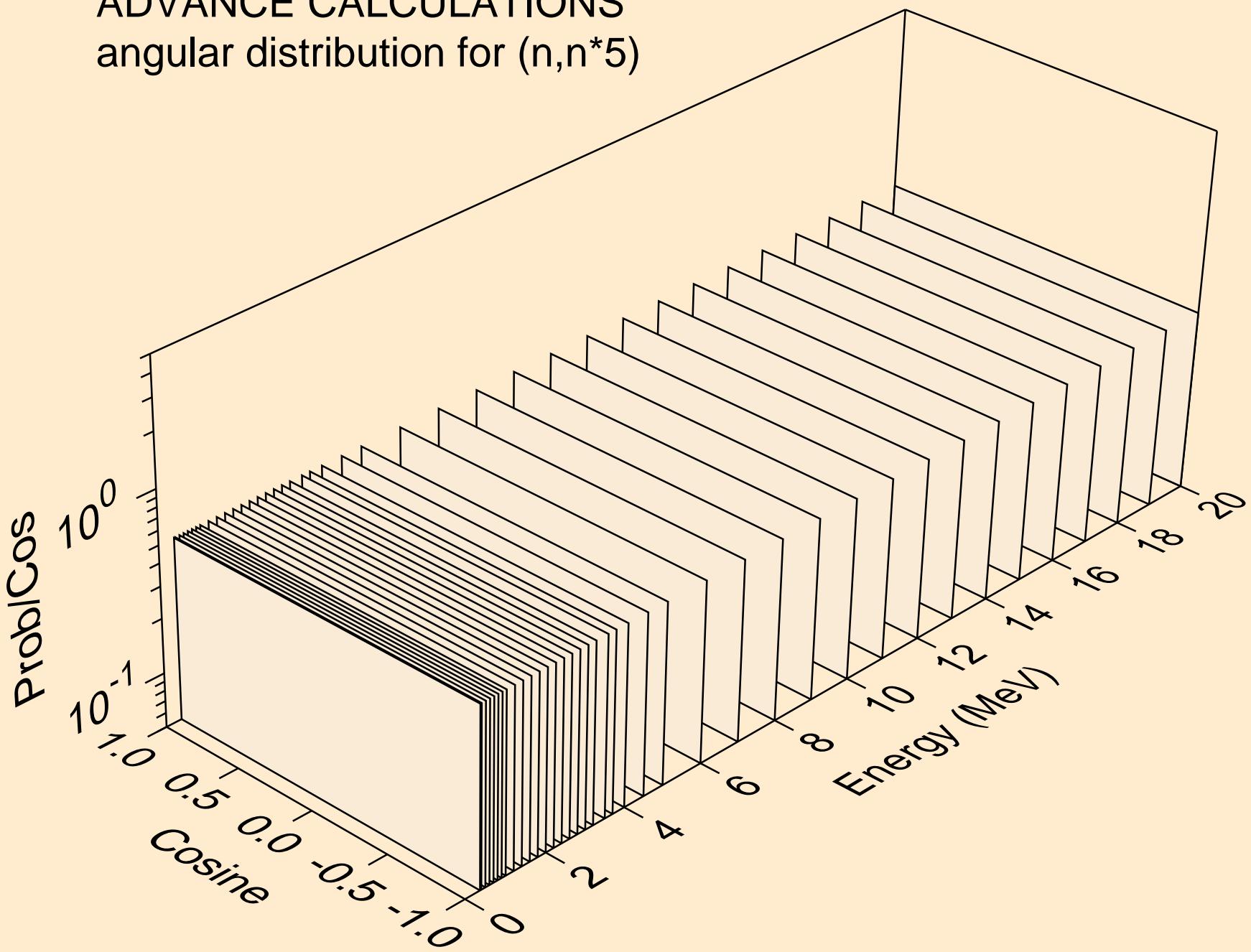
ADVANCE CALCULATIONS

angular distribution for (n,n^*4)



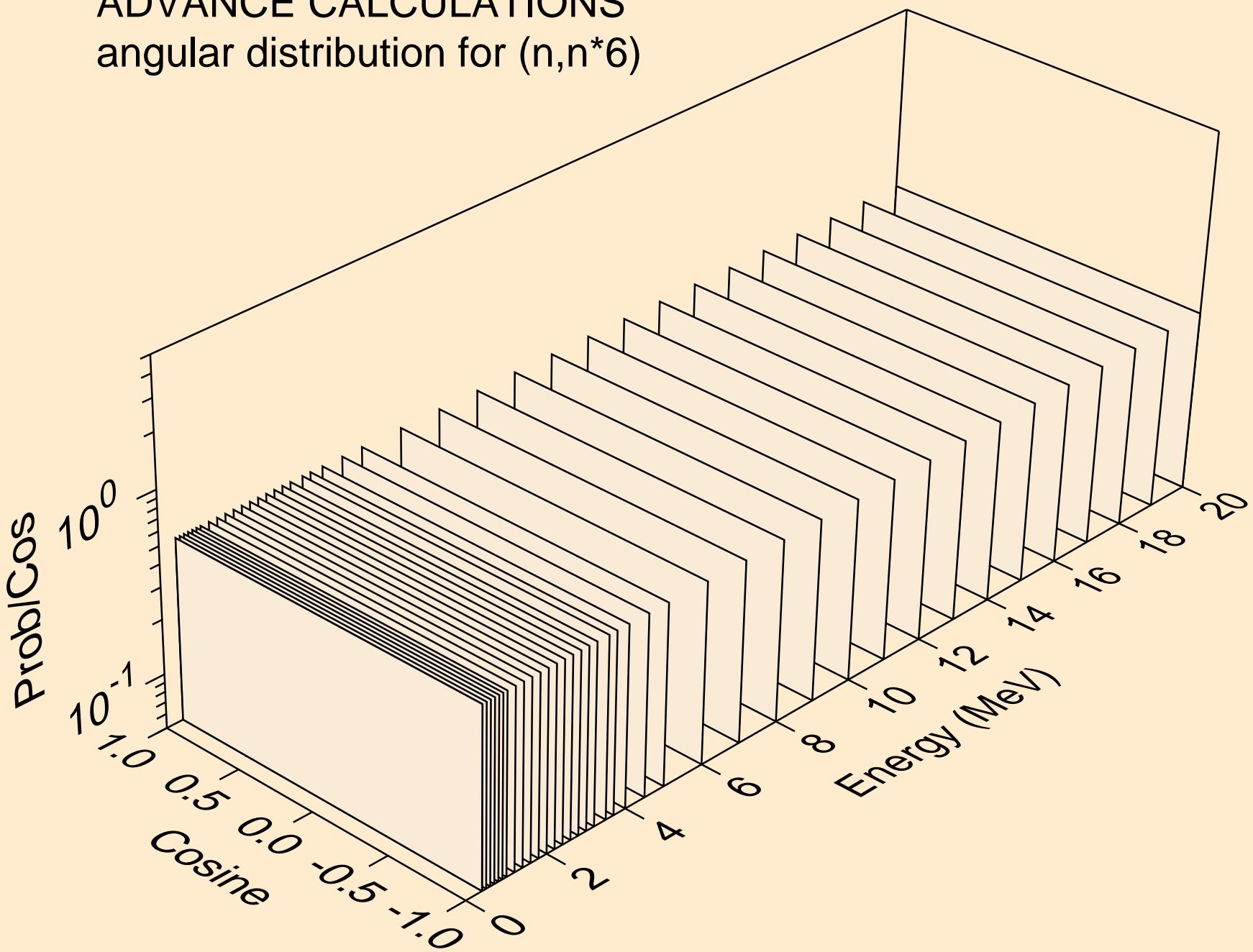
ADVANCE CALCULATIONS

angular distribution for (n,n^*)



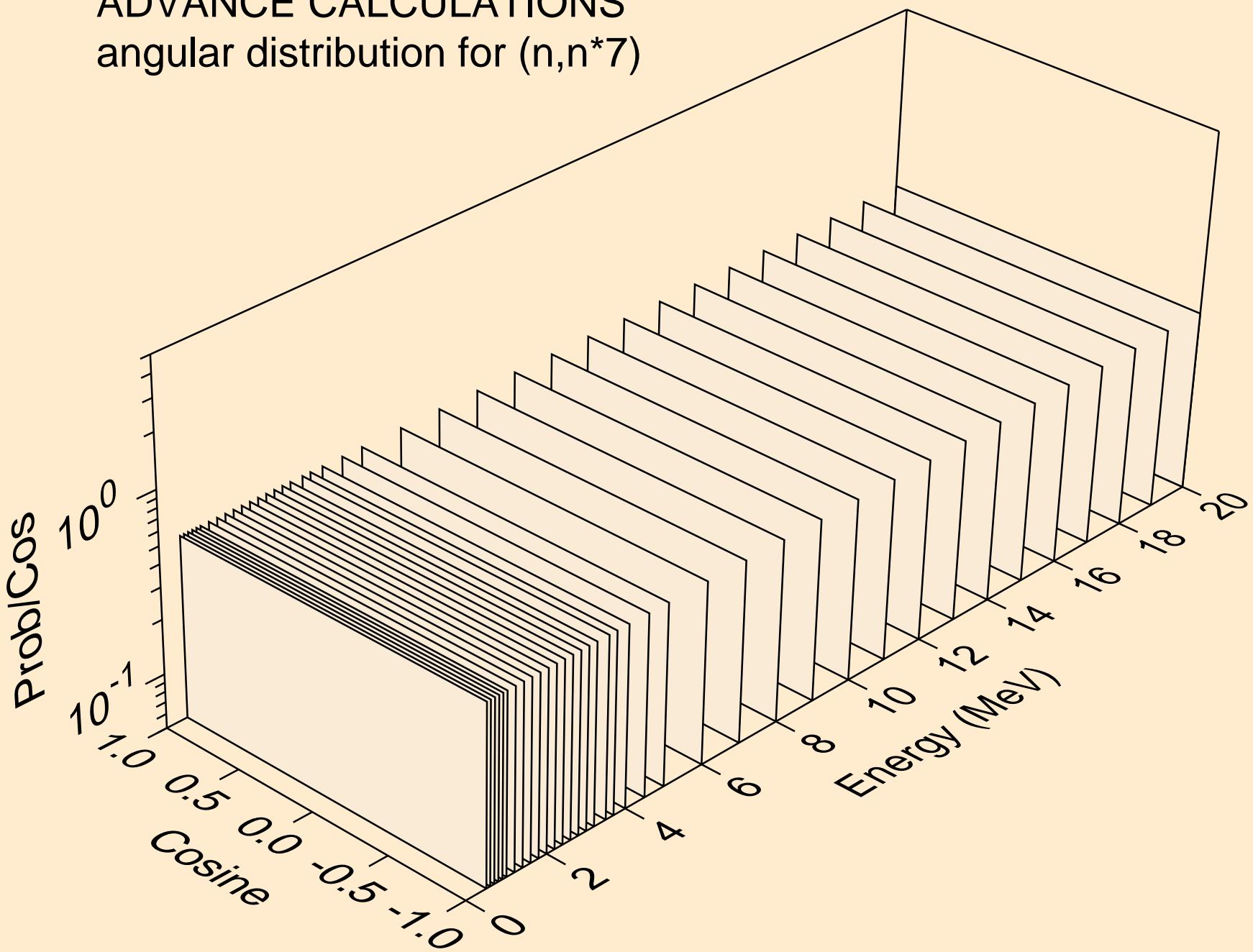
ADVANCE CALCULATIONS

angular distribution for (n,n^*6)



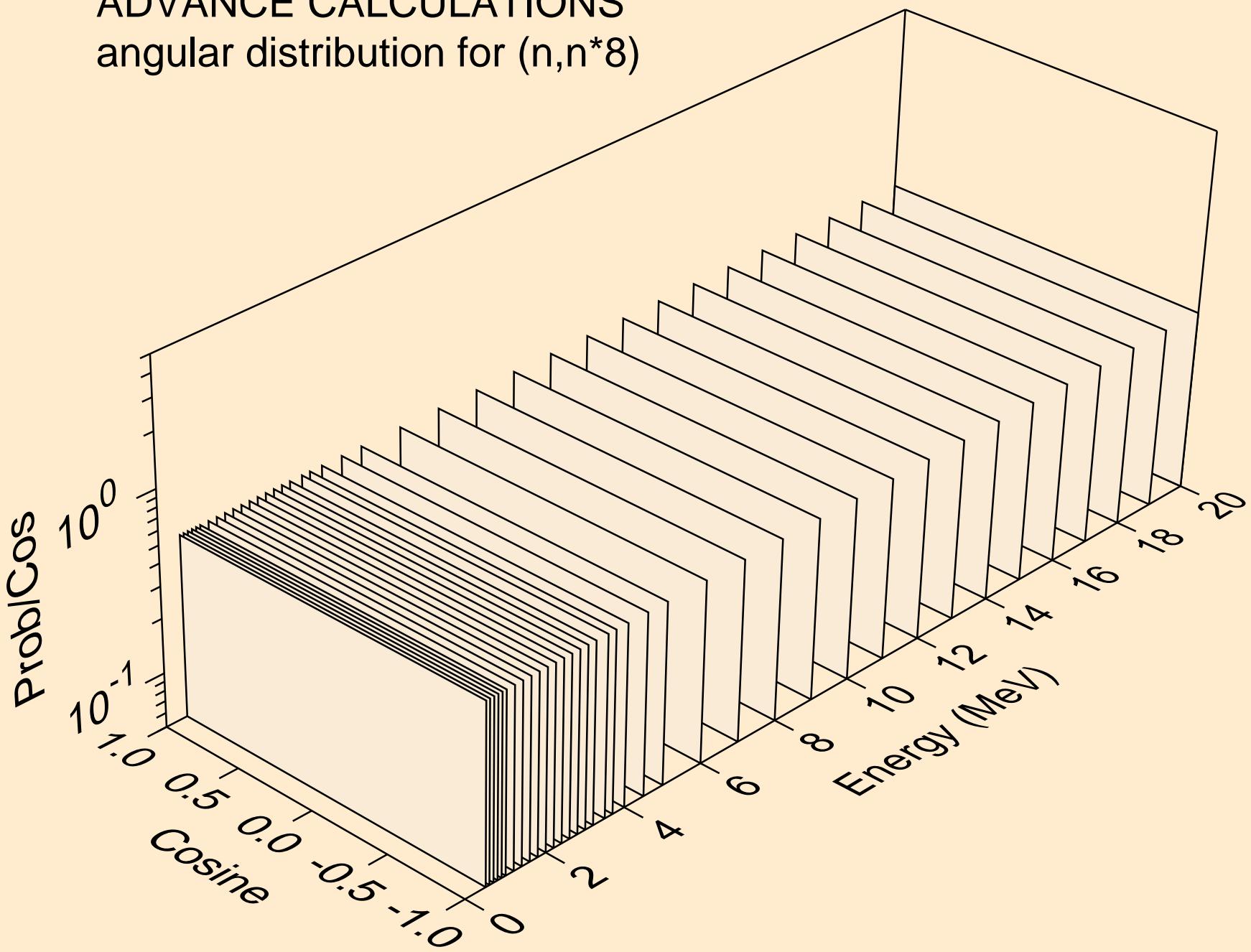
ADVANCE CALCULATIONS

angular distribution for (n,n^*7)



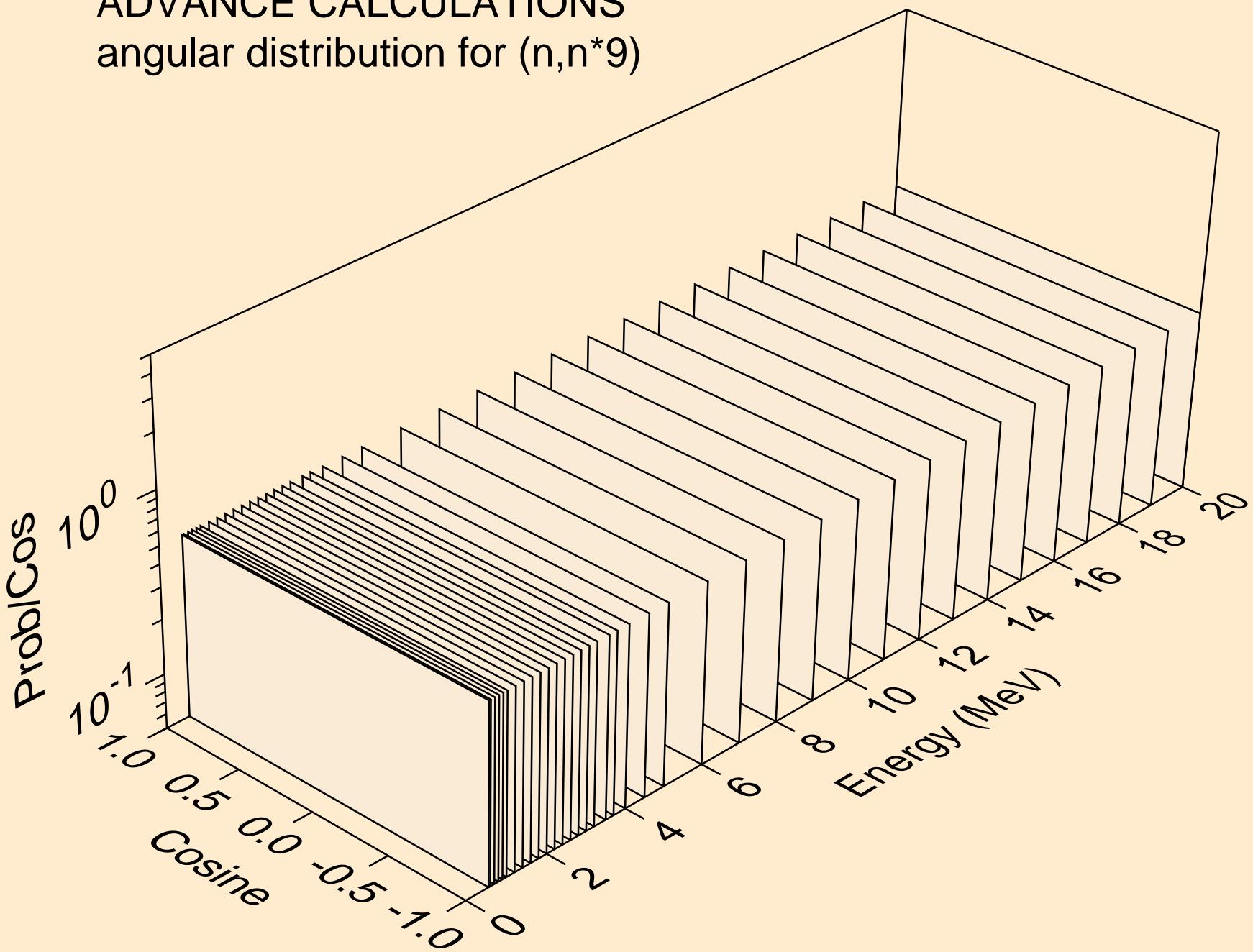
ADVANCE CALCULATIONS

angular distribution for $(n,n^*)^8$



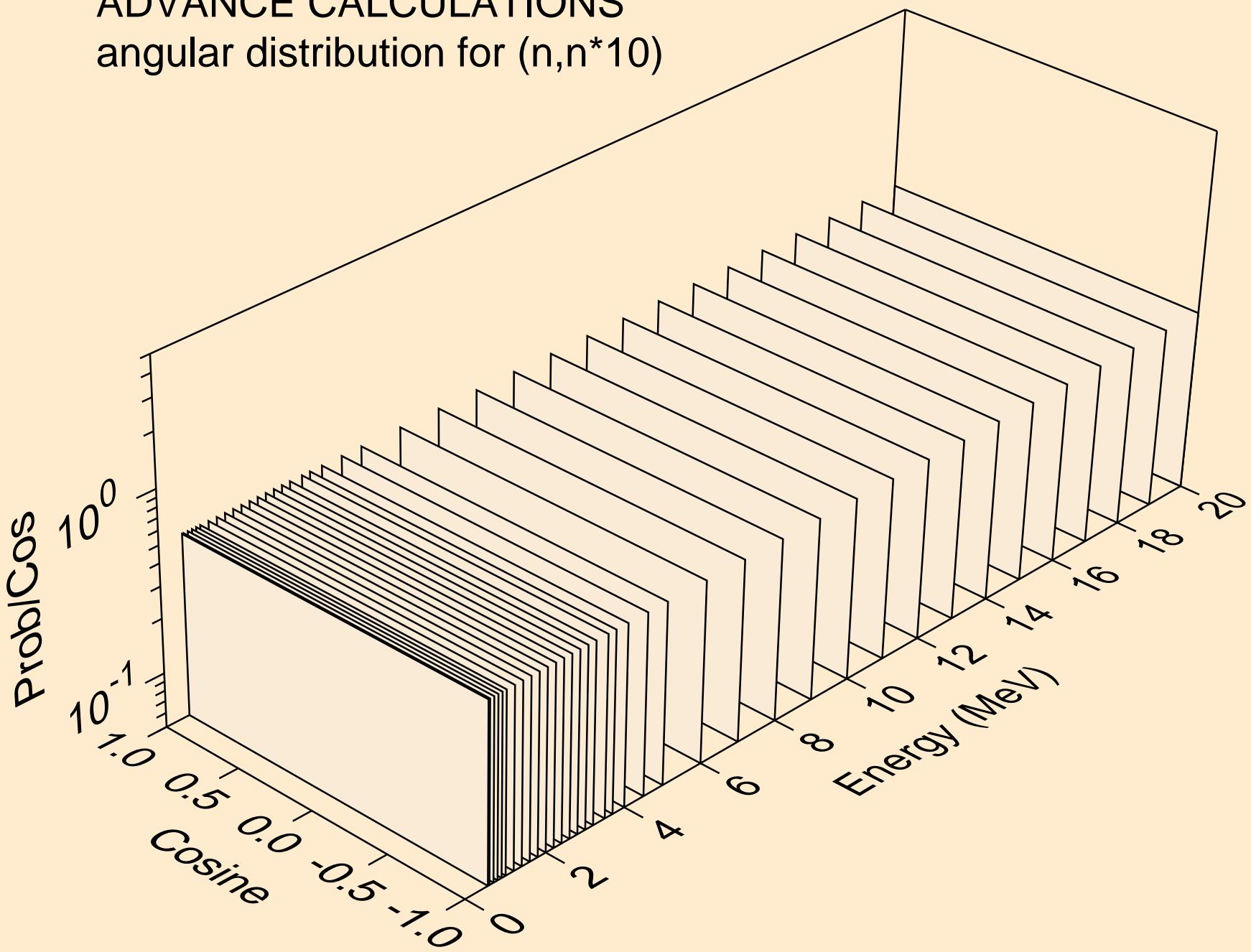
ADVANCE CALCULATIONS

angular distribution for (n,n*9)



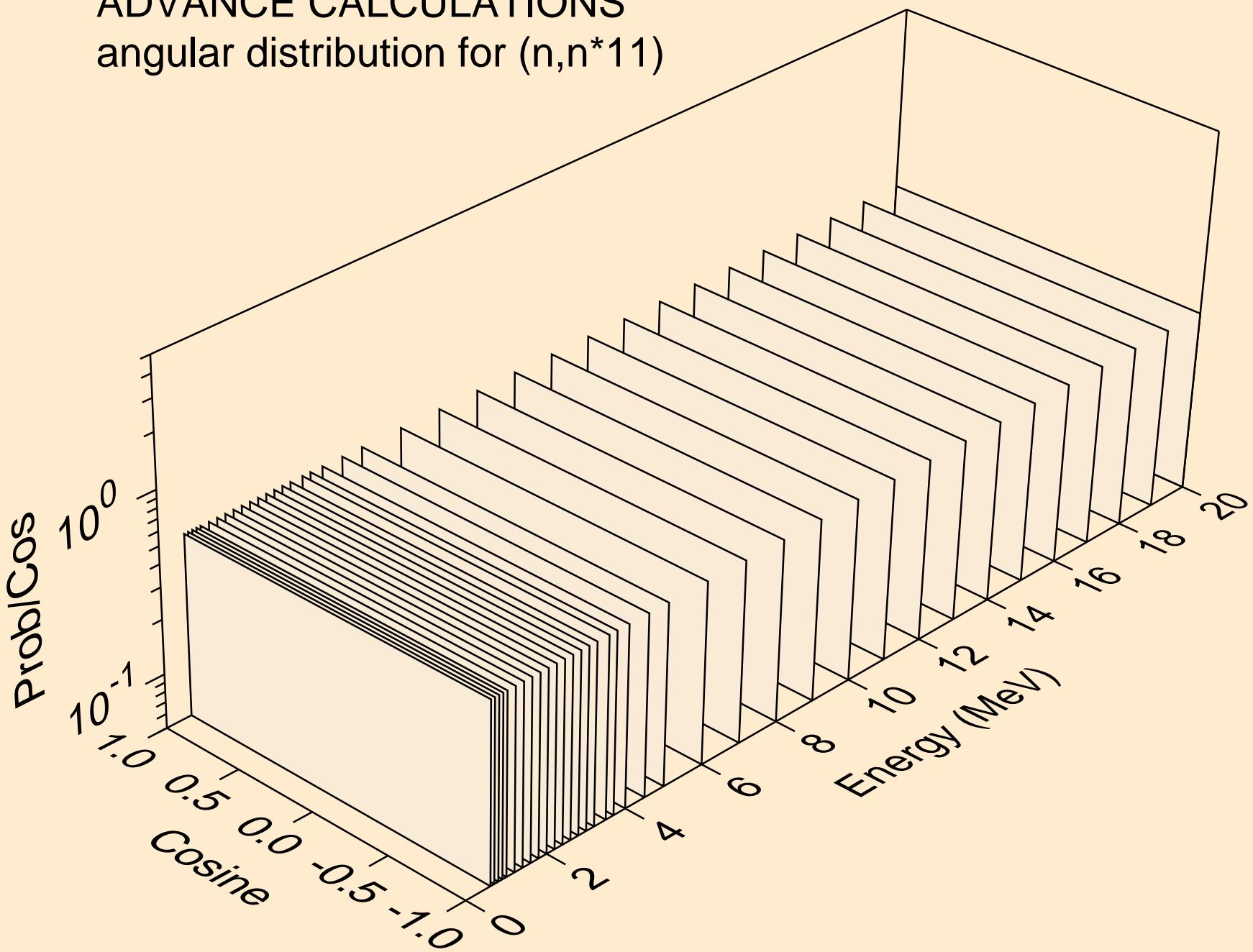
ADVANCE CALCULATIONS

angular distribution for (n,n*10)



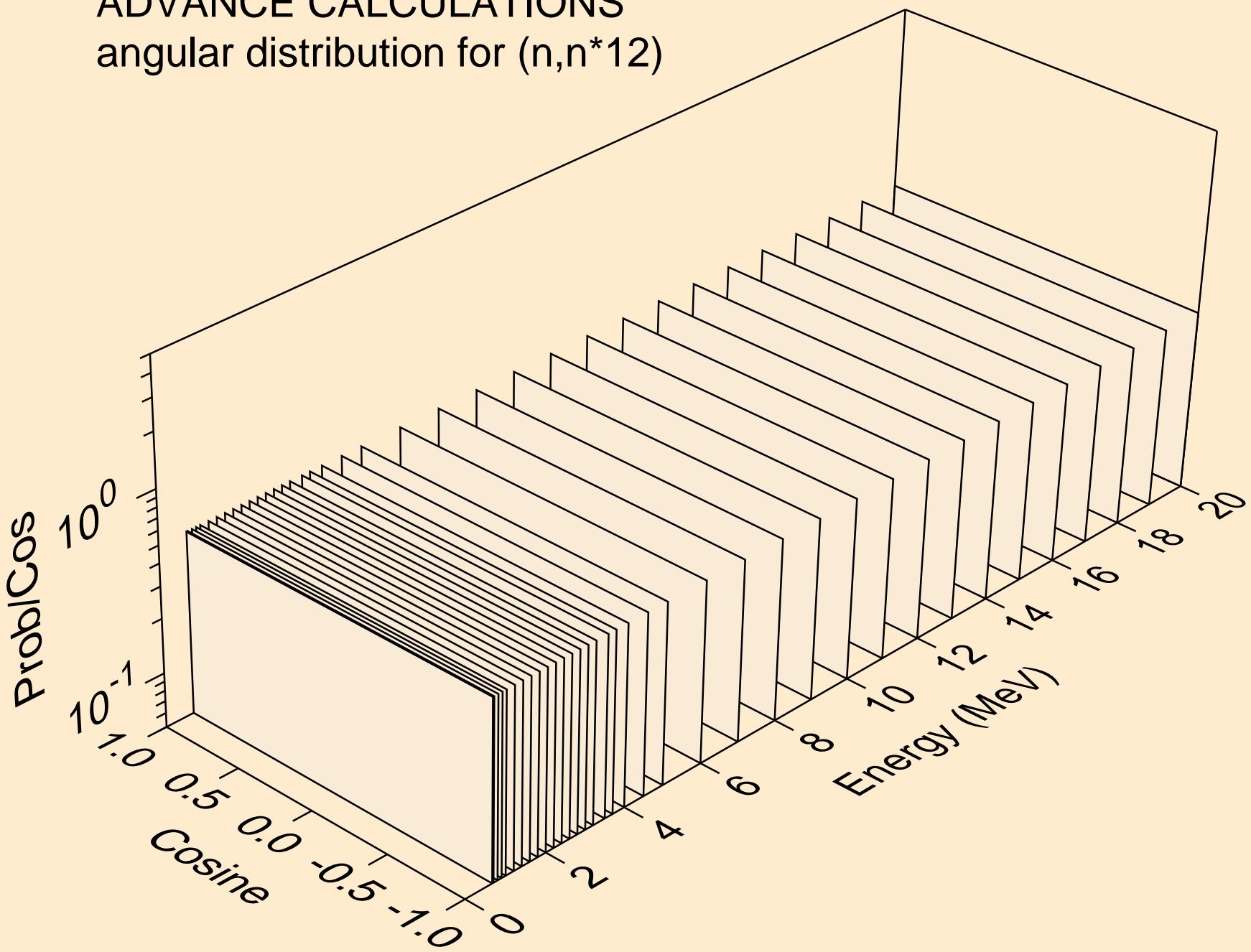
ADVANCE CALCULATIONS

angular distribution for (n,n*11)



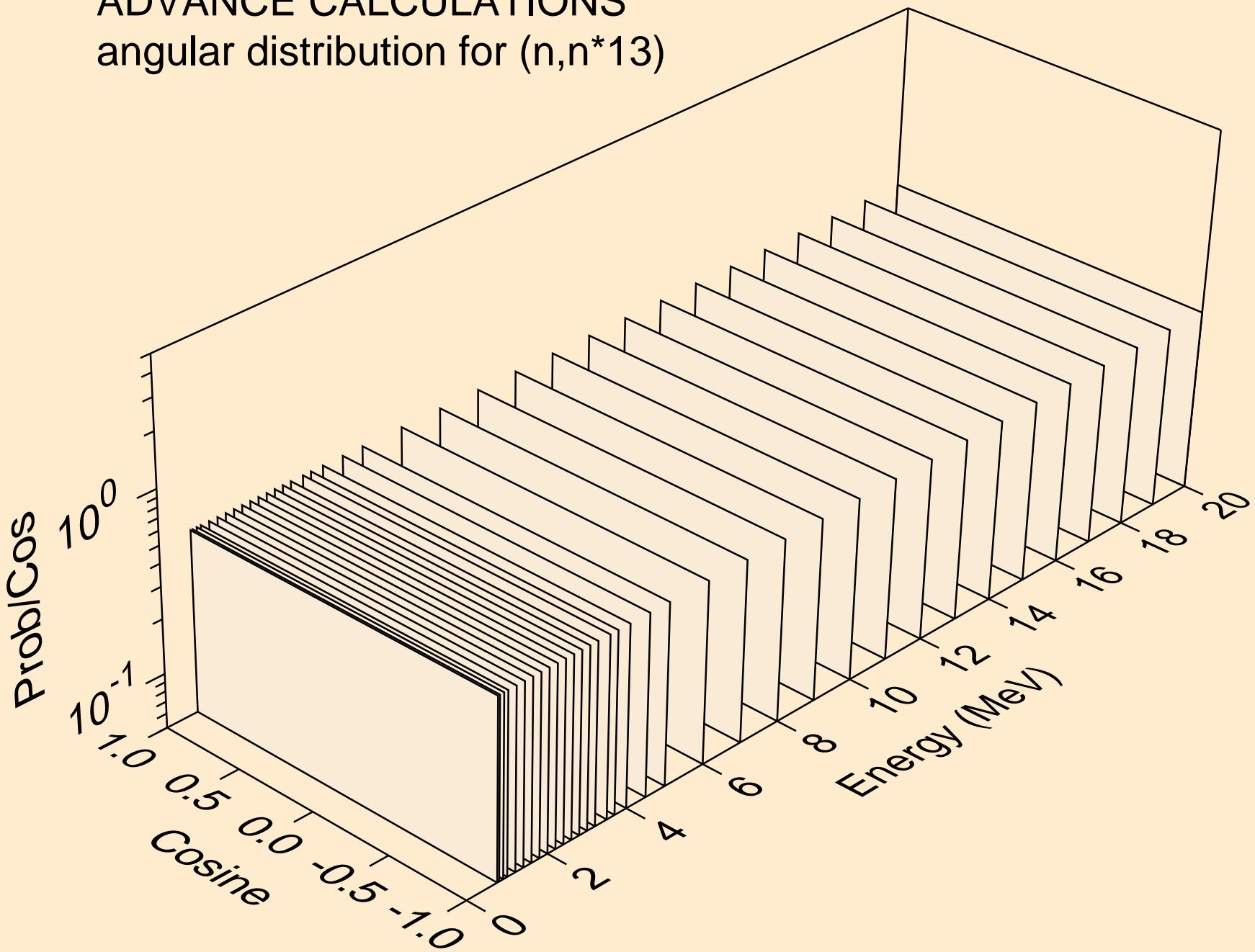
ADVANCE CALCULATIONS

angular distribution for (n,n^*12)



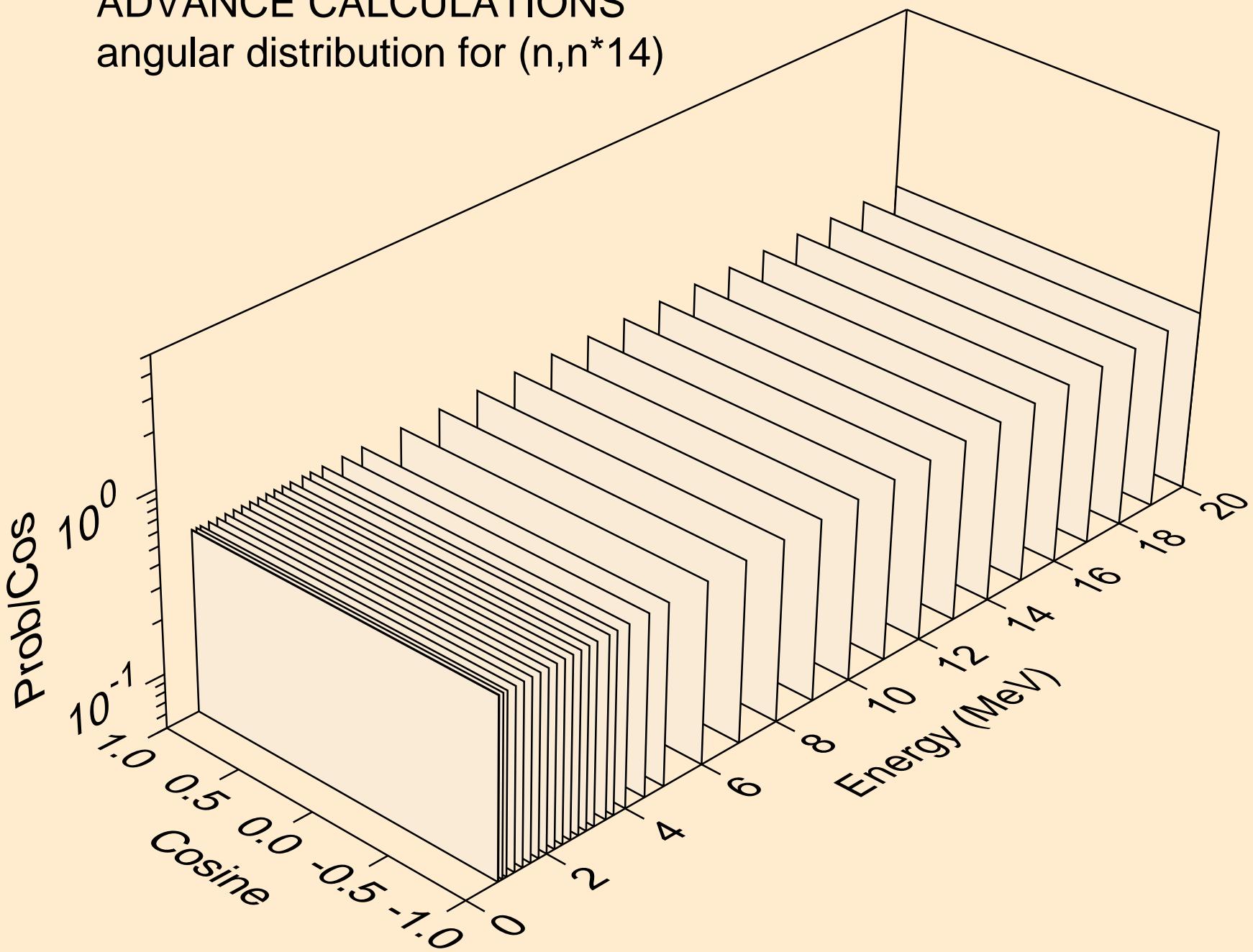
ADVANCE CALCULATIONS

angular distribution for (n,n*13)



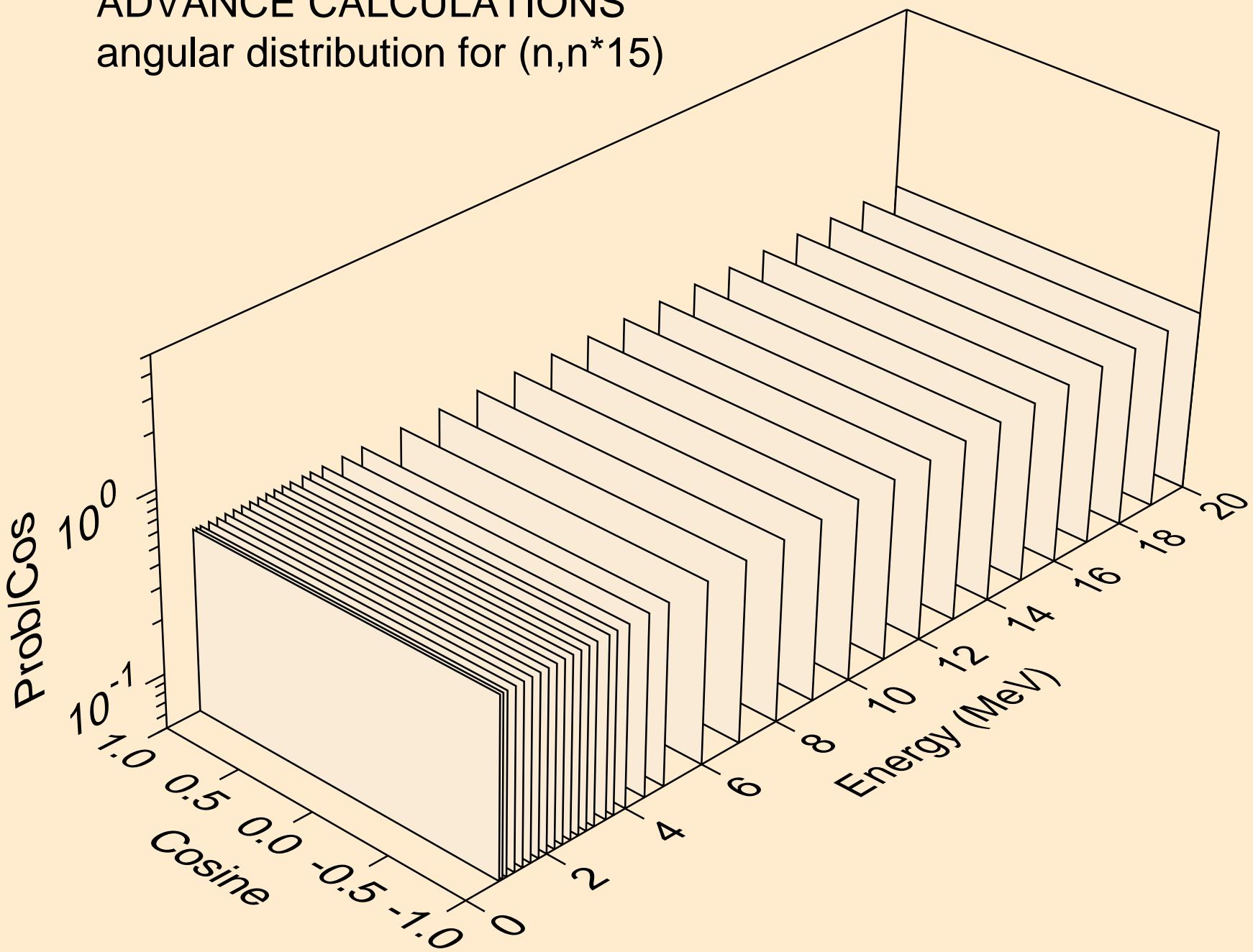
ADVANCE CALCULATIONS

angular distribution for (n,n*14)



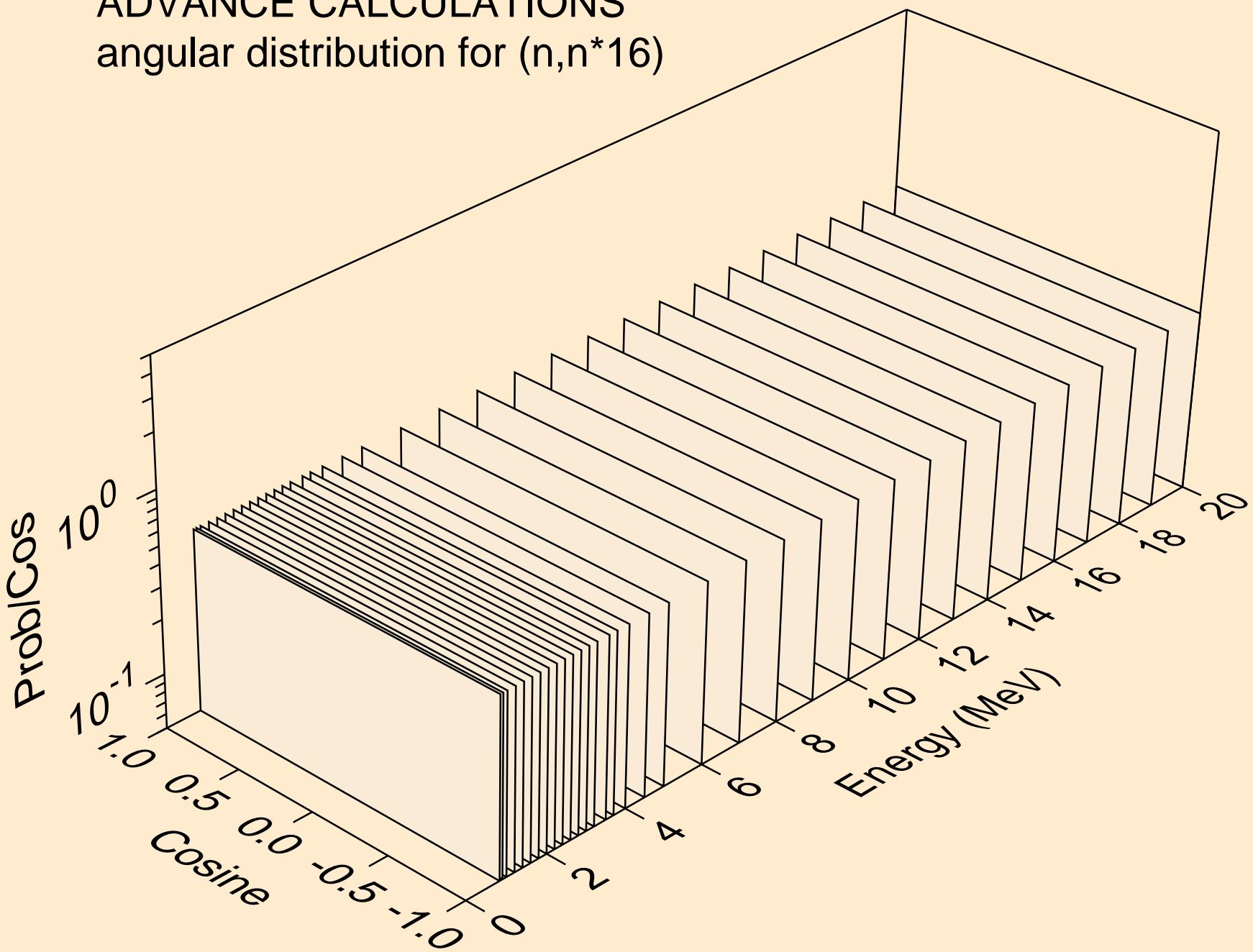
ADVANCE CALCULATIONS

angular distribution for (n,n*15)



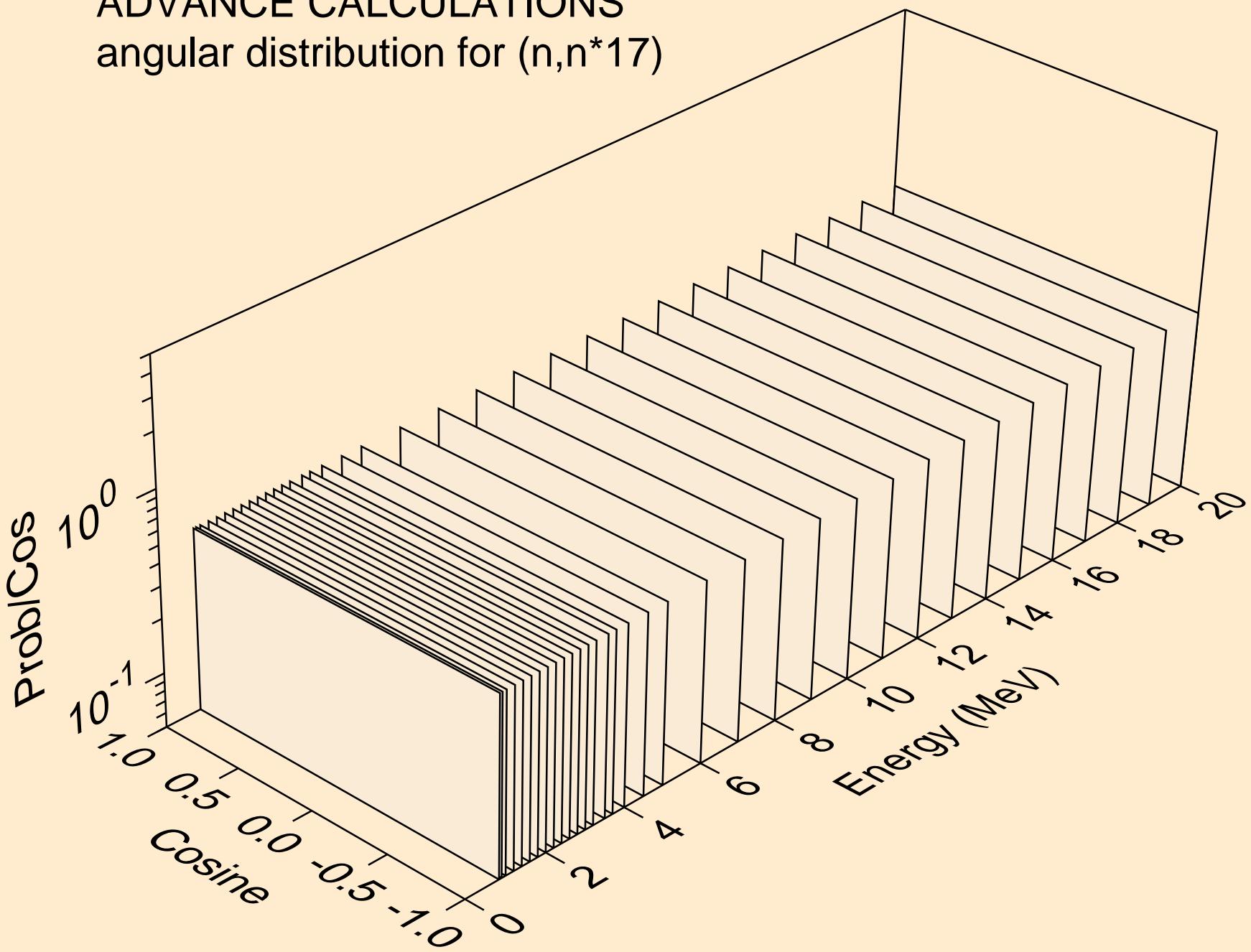
ADVANCE CALCULATIONS

angular distribution for (n,n*16)



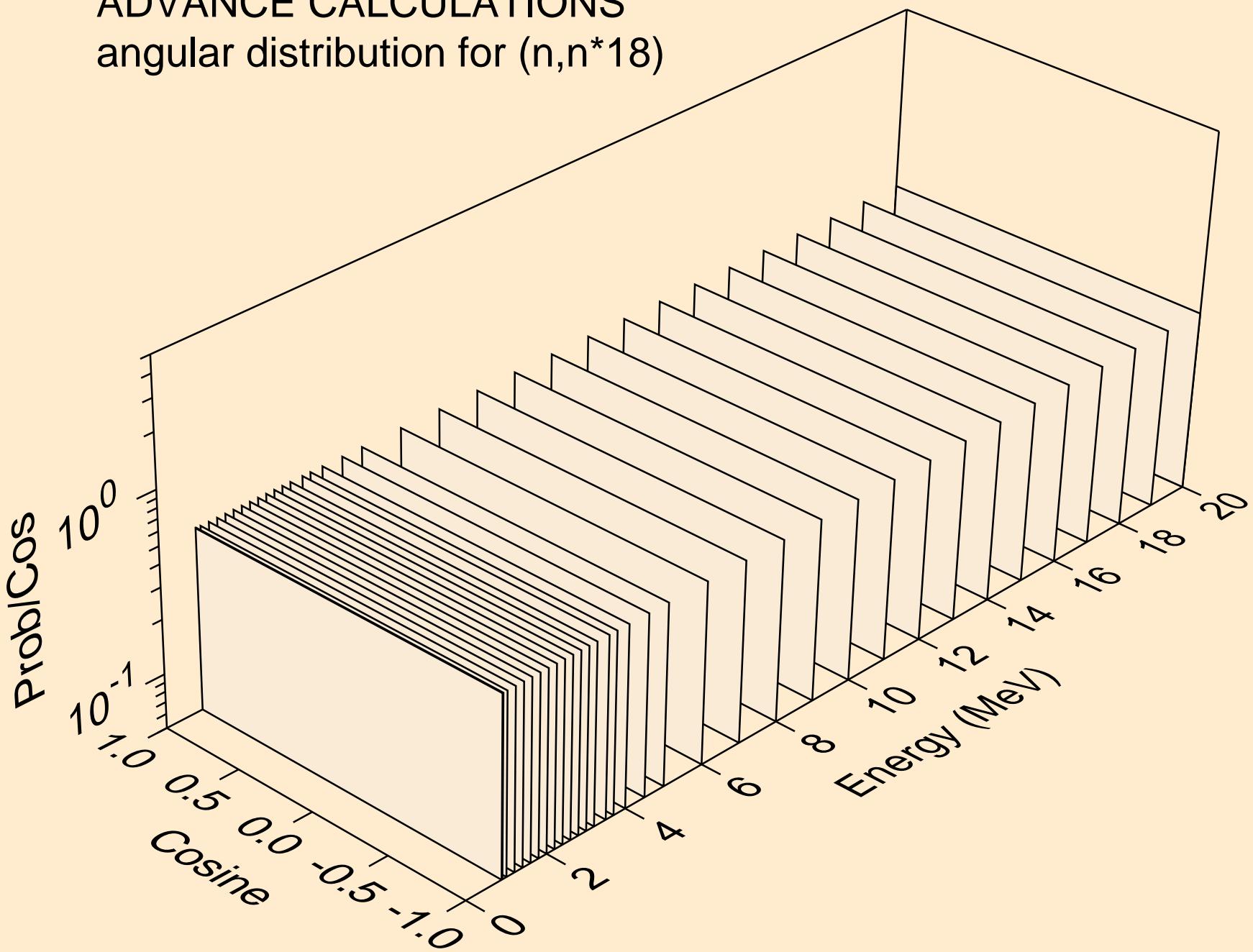
ADVANCE CALCULATIONS

angular distribution for (n,n*17)



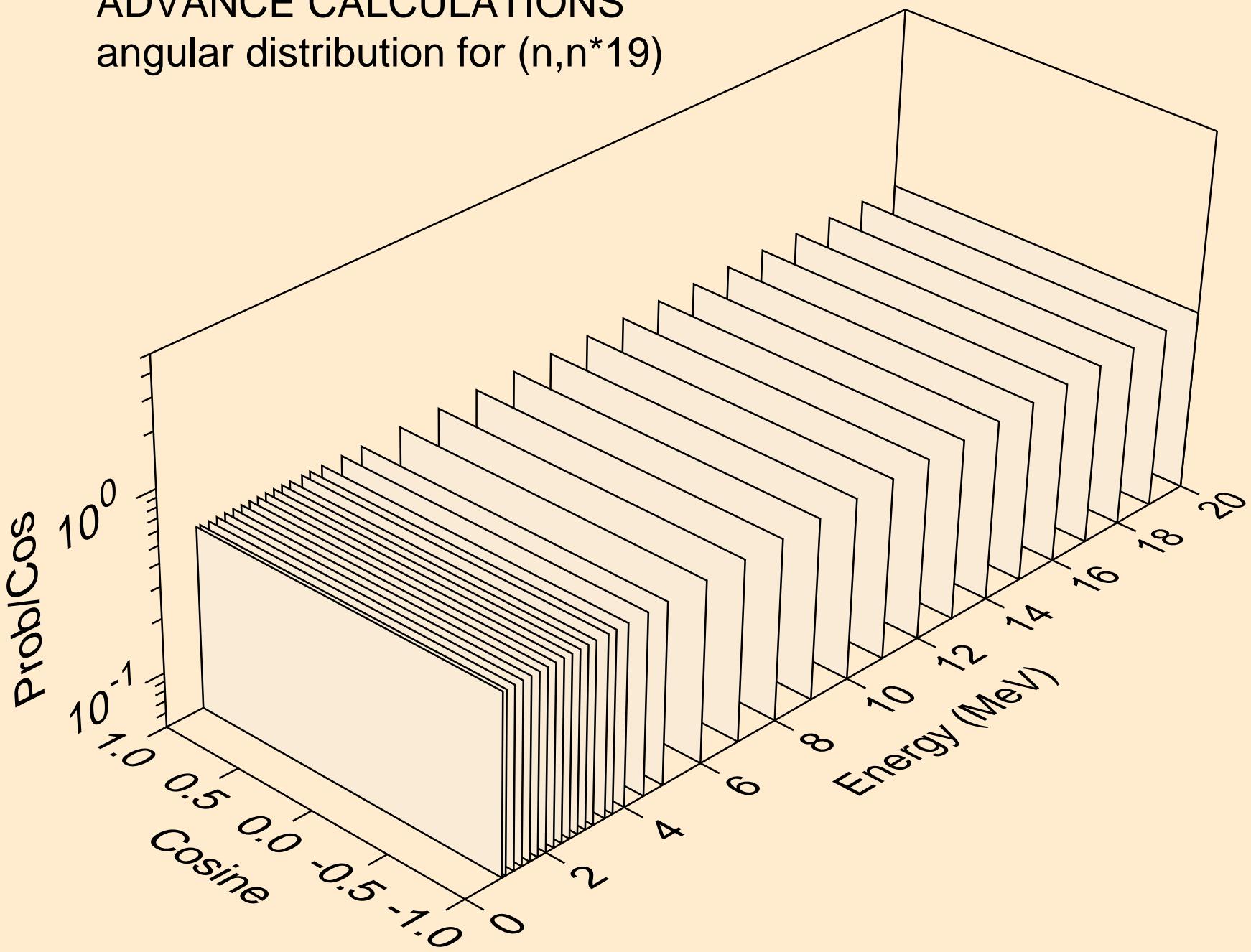
ADVANCE CALCULATIONS

angular distribution for (n,n*18)



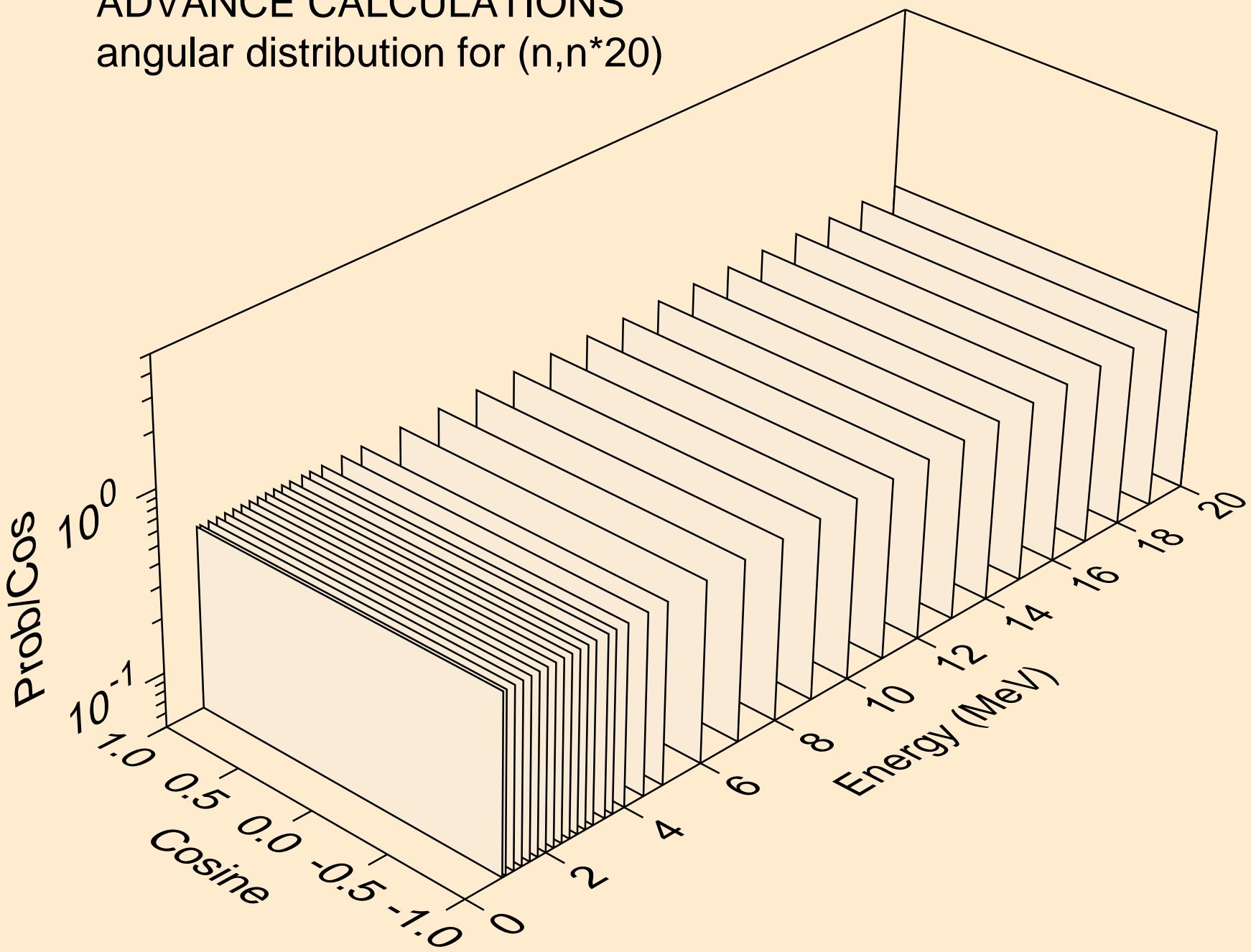
ADVANCE CALCULATIONS

angular distribution for (n,n*19)



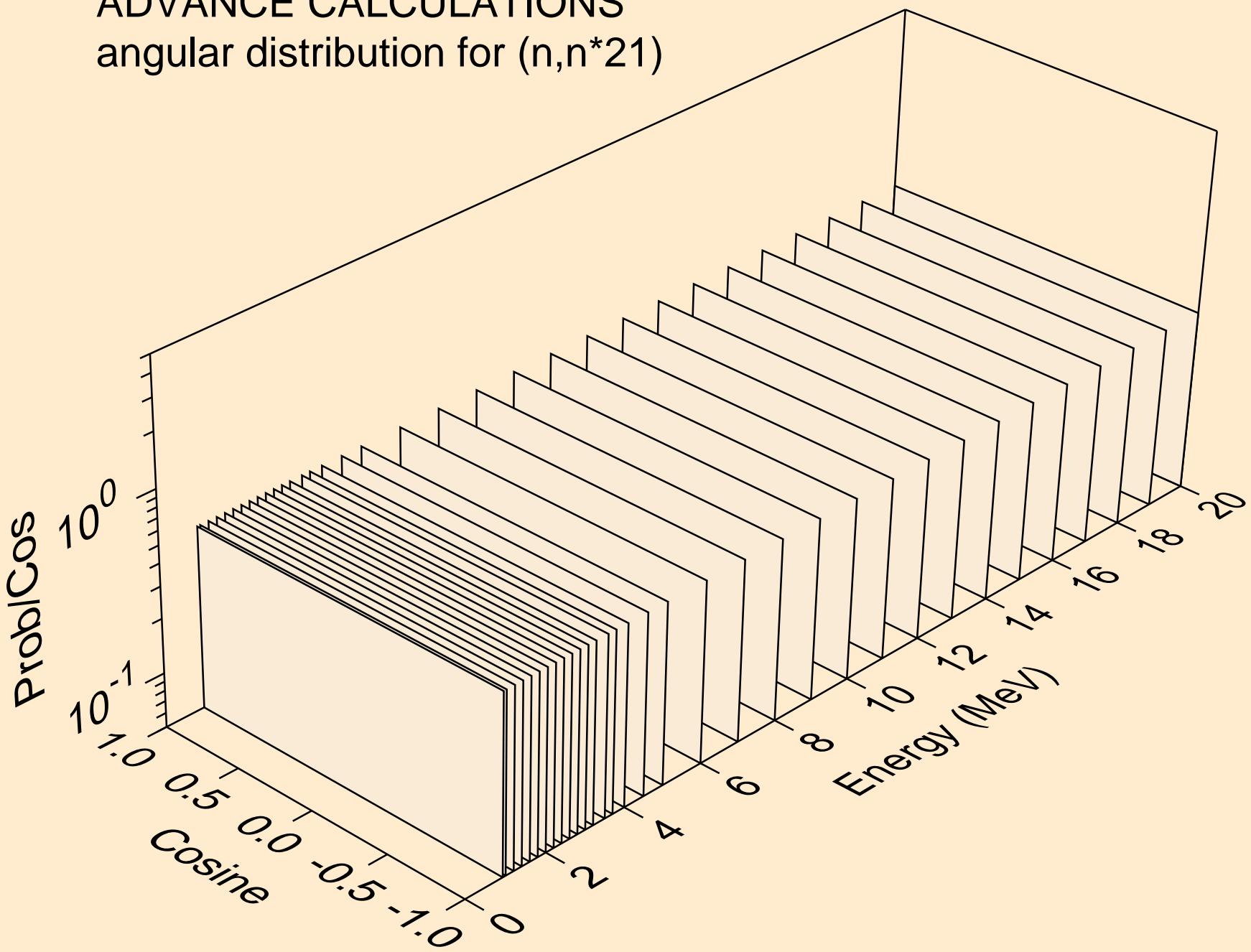
ADVANCE CALCULATIONS

angular distribution for (n,n*20)



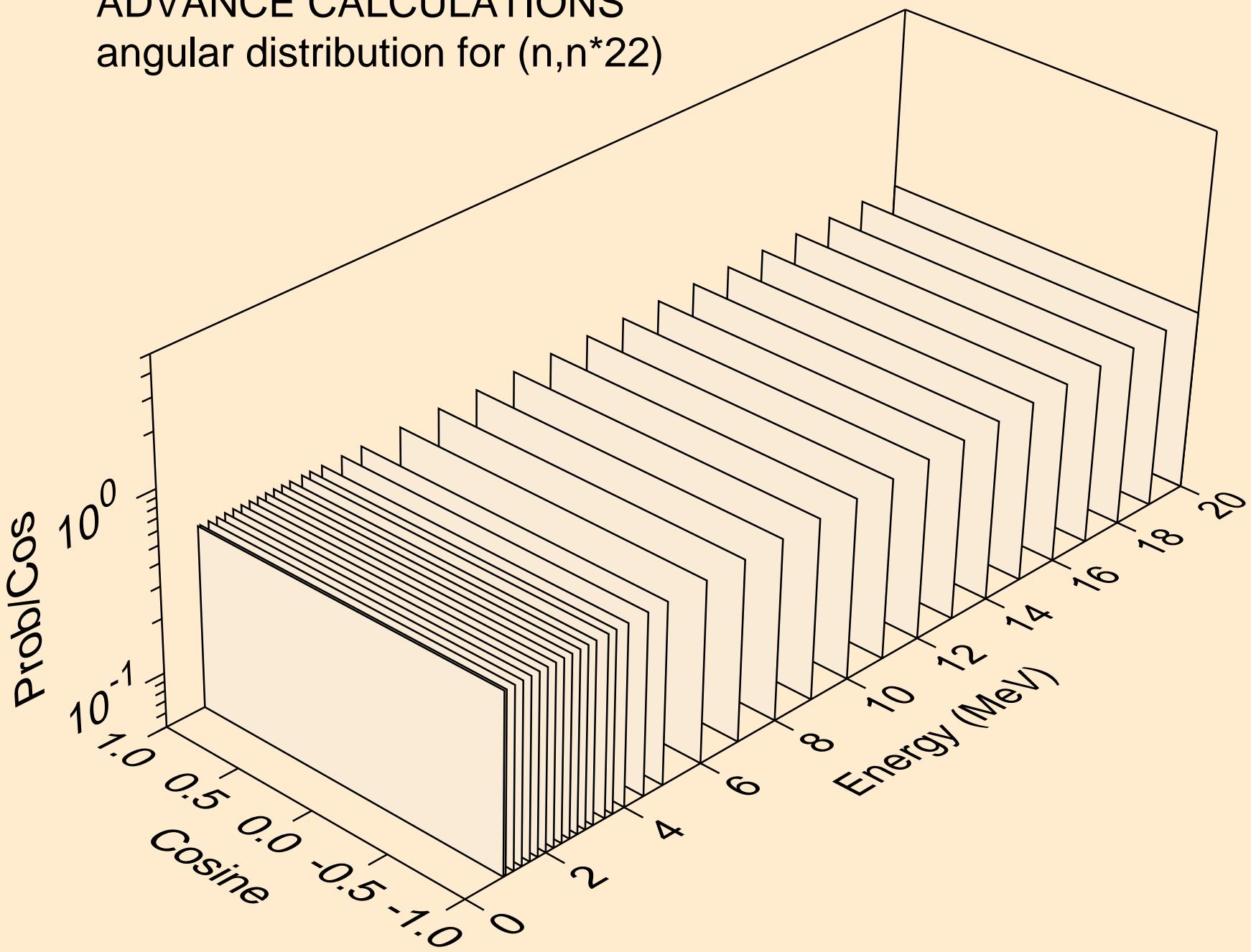
ADVANCE CALCULATIONS

angular distribution for (n,n*21)



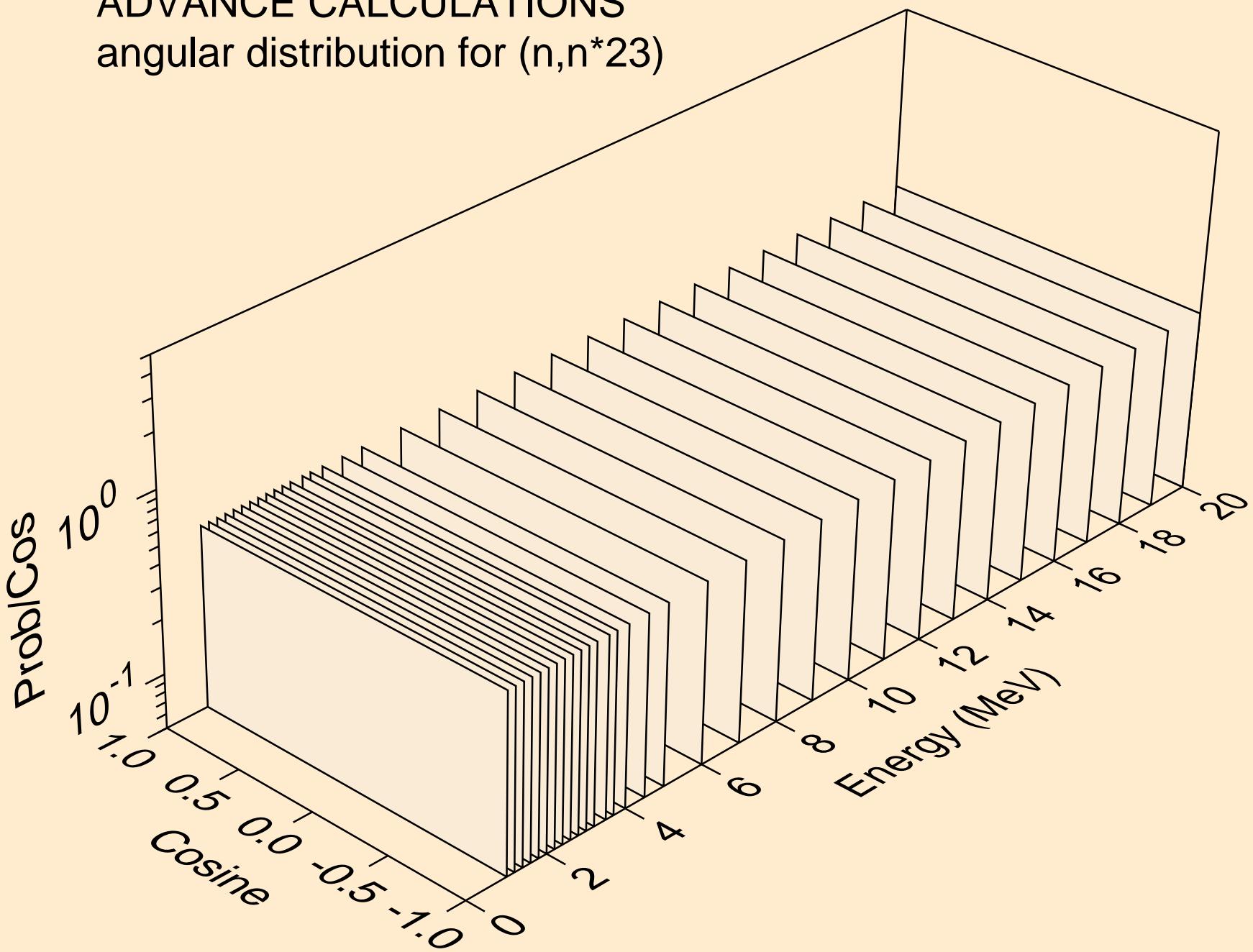
ADVANCE CALCULATIONS

angular distribution for $(n,n^*)^{22}$



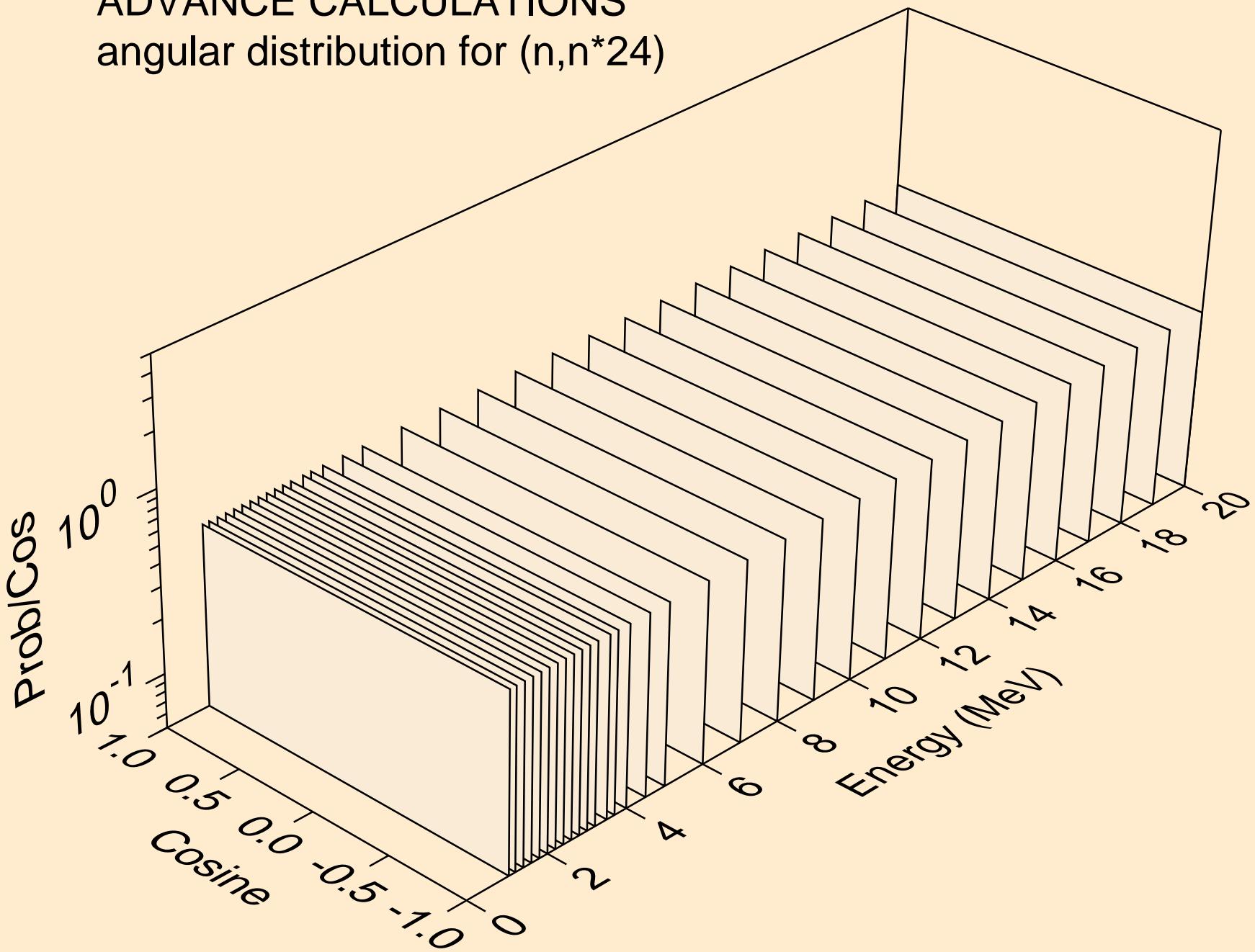
ADVANCE CALCULATIONS

angular distribution for (n,n^*23)



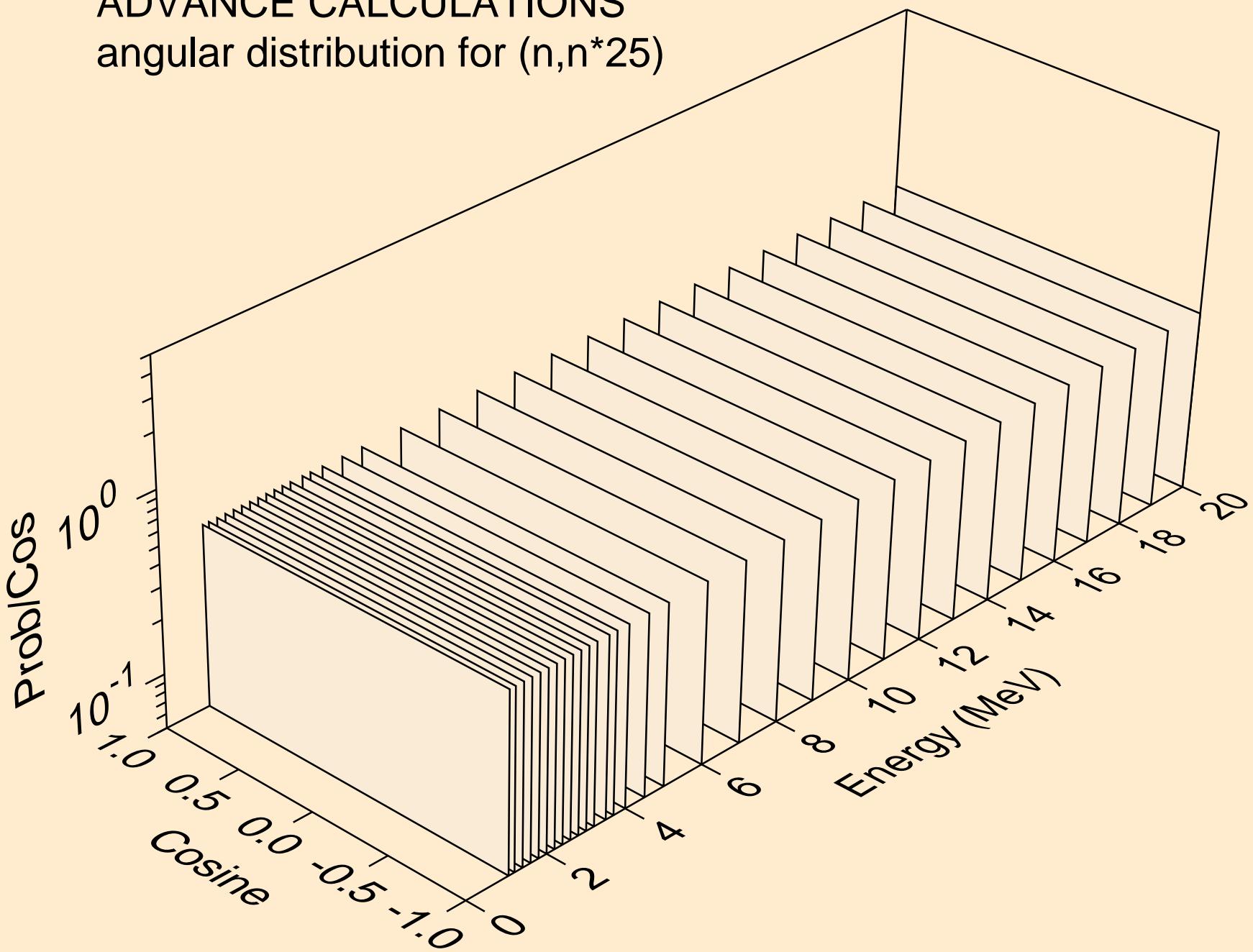
ADVANCE CALCULATIONS

angular distribution for (n,n^*24)



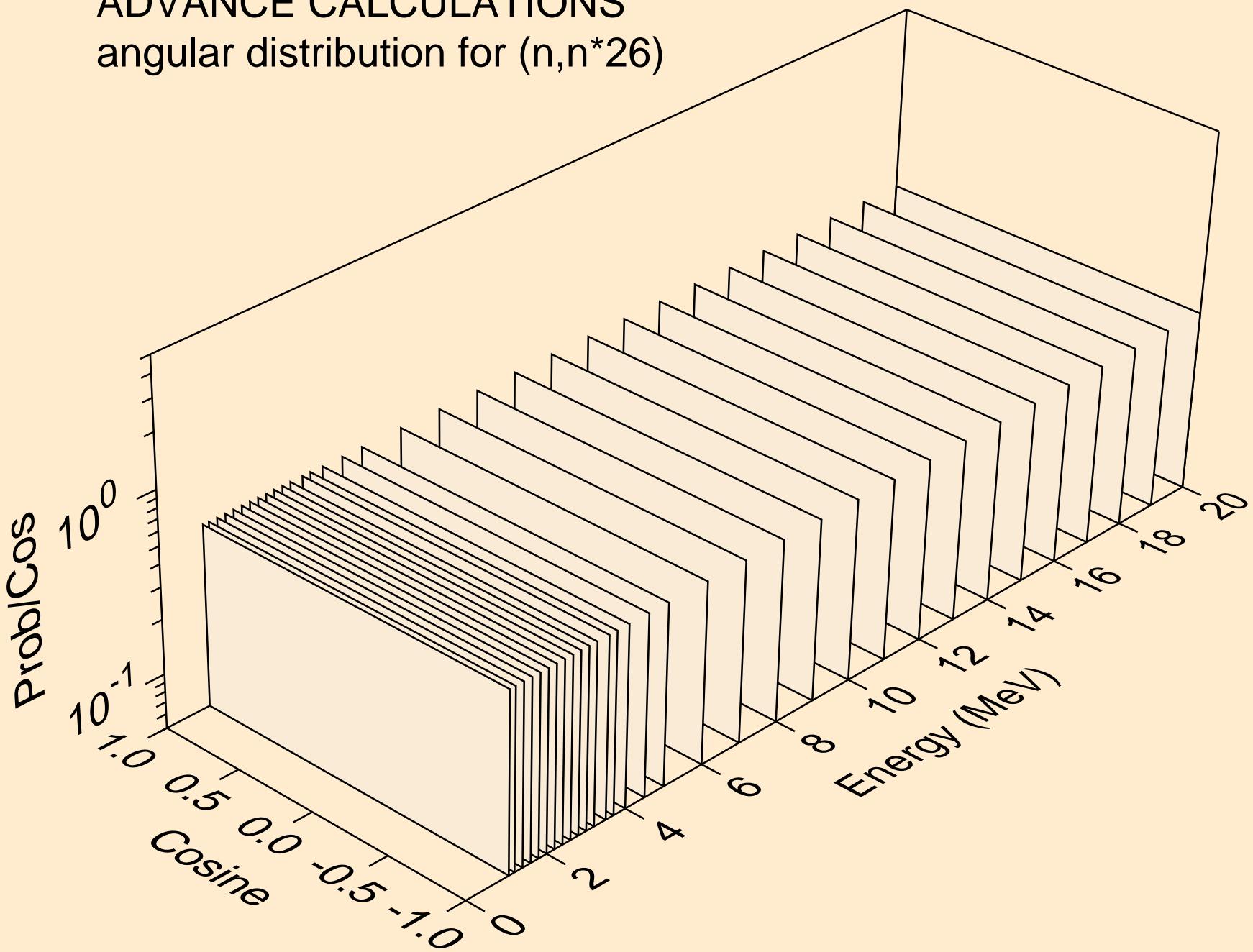
ADVANCE CALCULATIONS

angular distribution for (n,n*25)



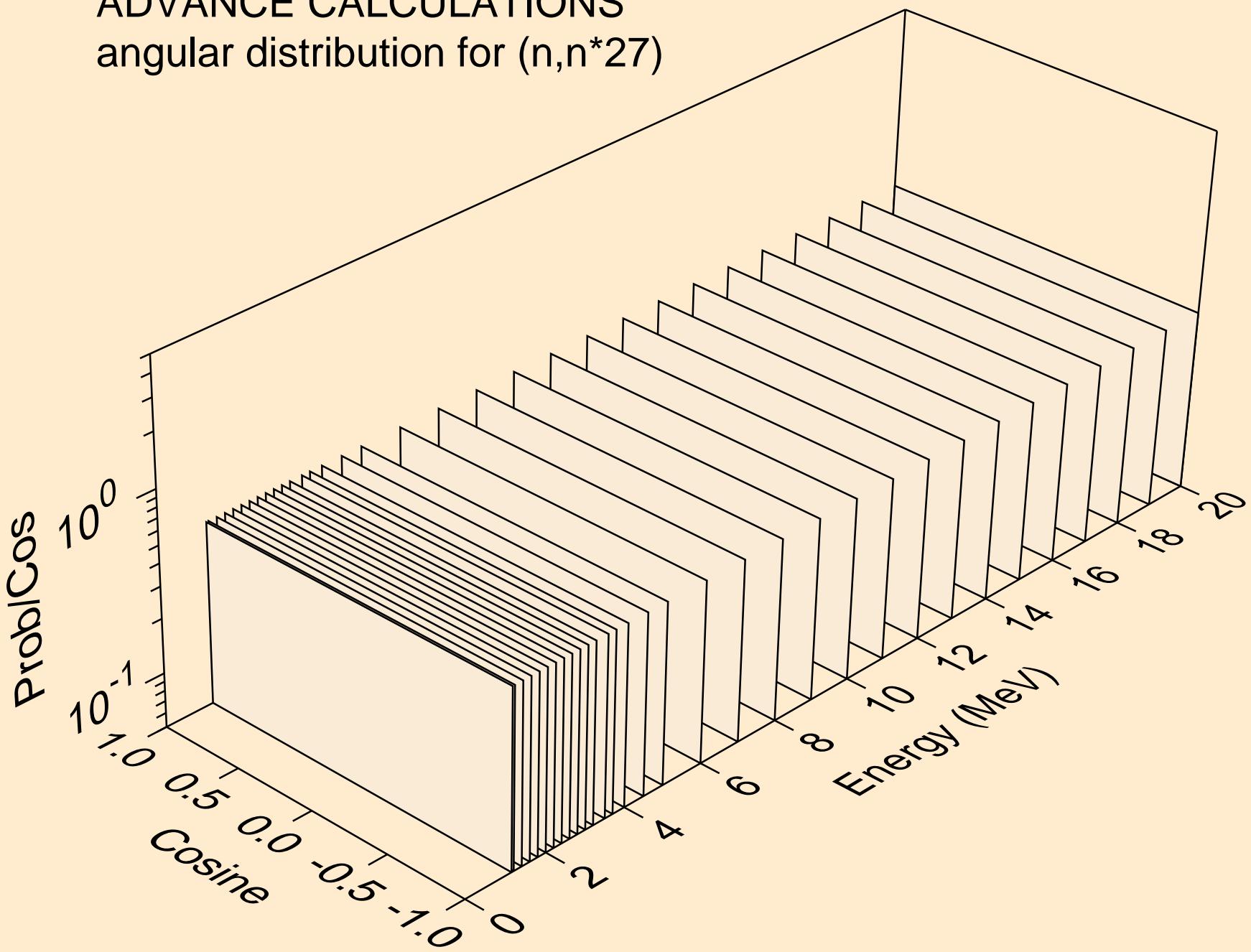
ADVANCE CALCULATIONS

angular distribution for (n,n*26)



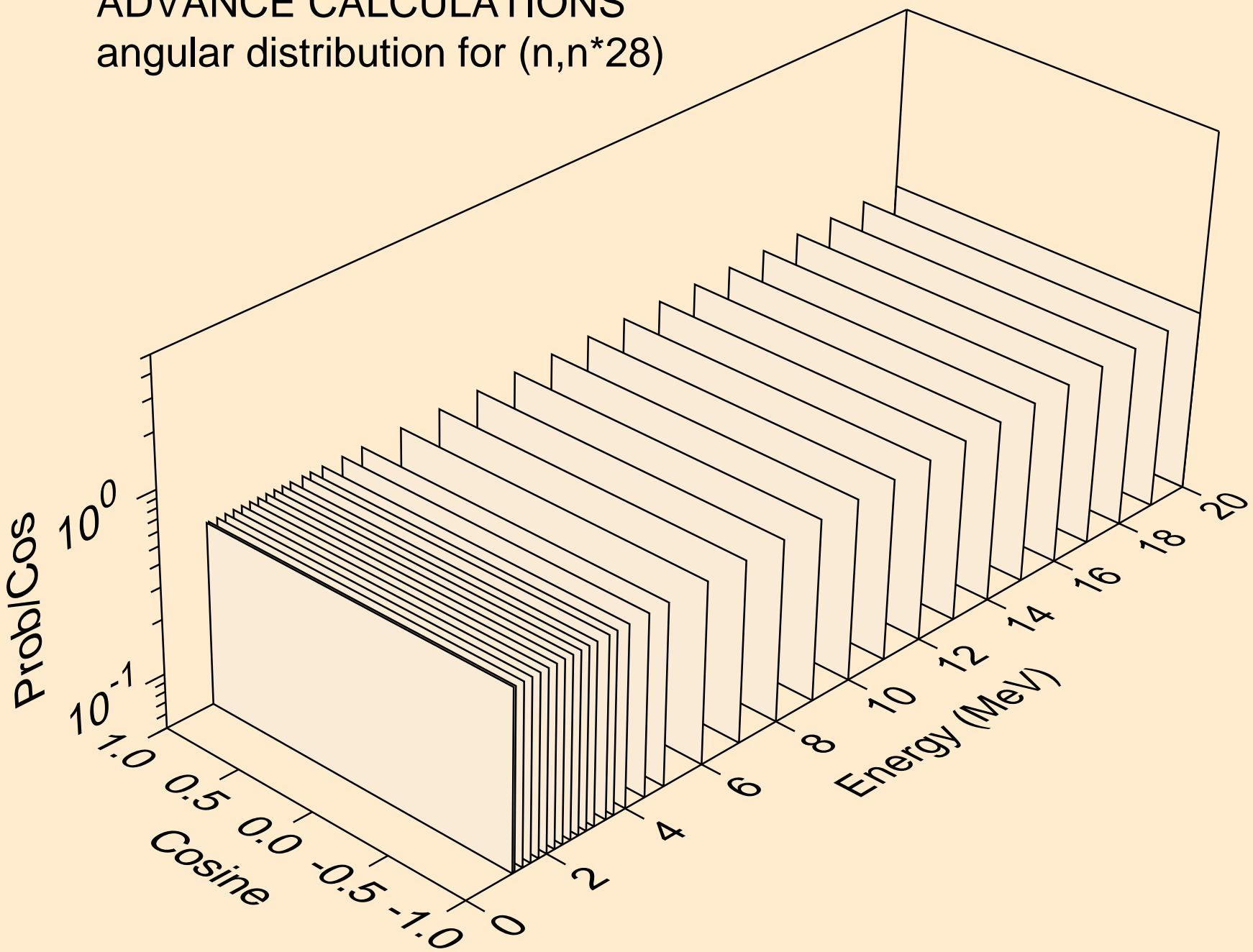
ADVANCE CALCULATIONS

angular distribution for (n,n^*27)



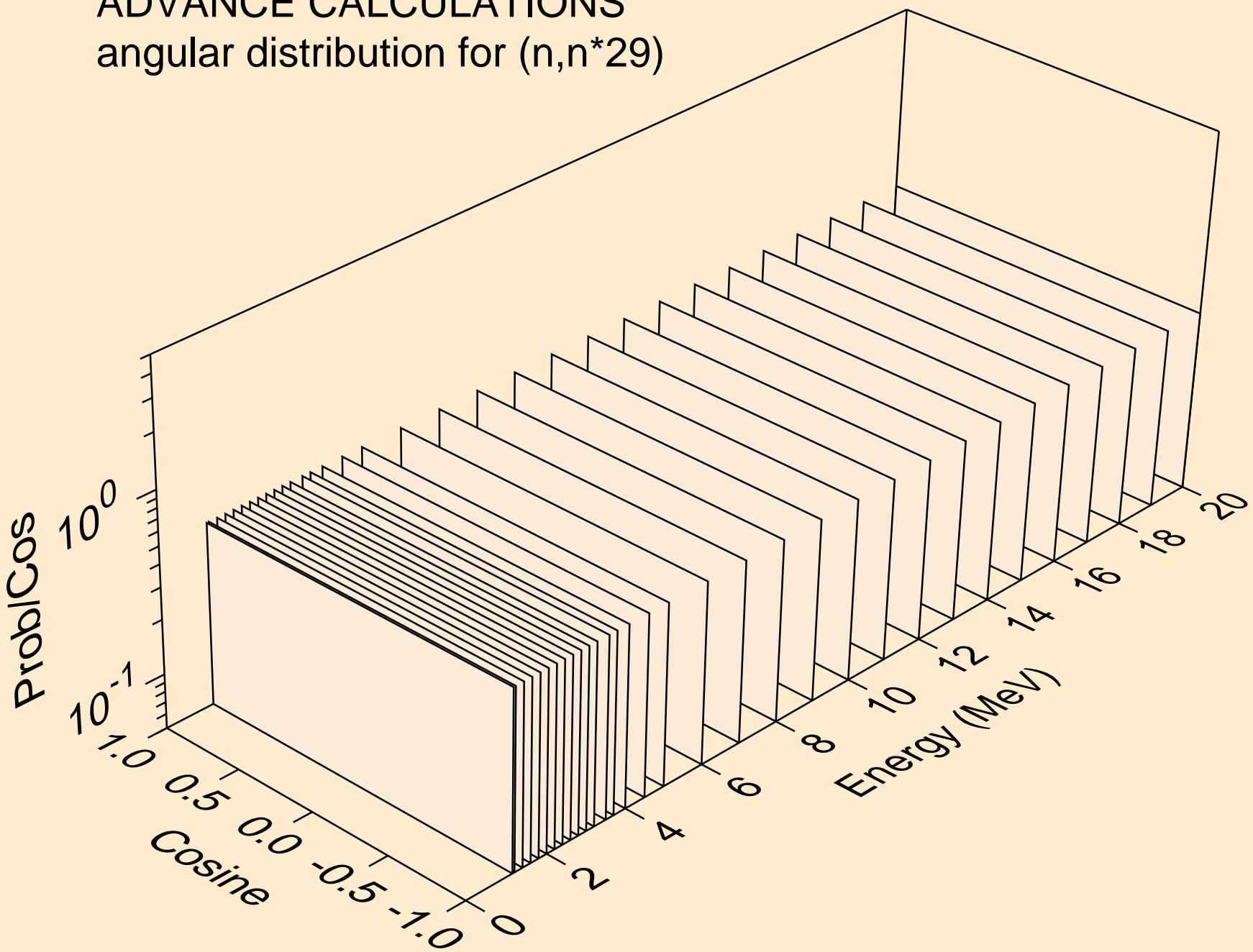
ADVANCE CALCULATIONS

angular distribution for (n,n*28)



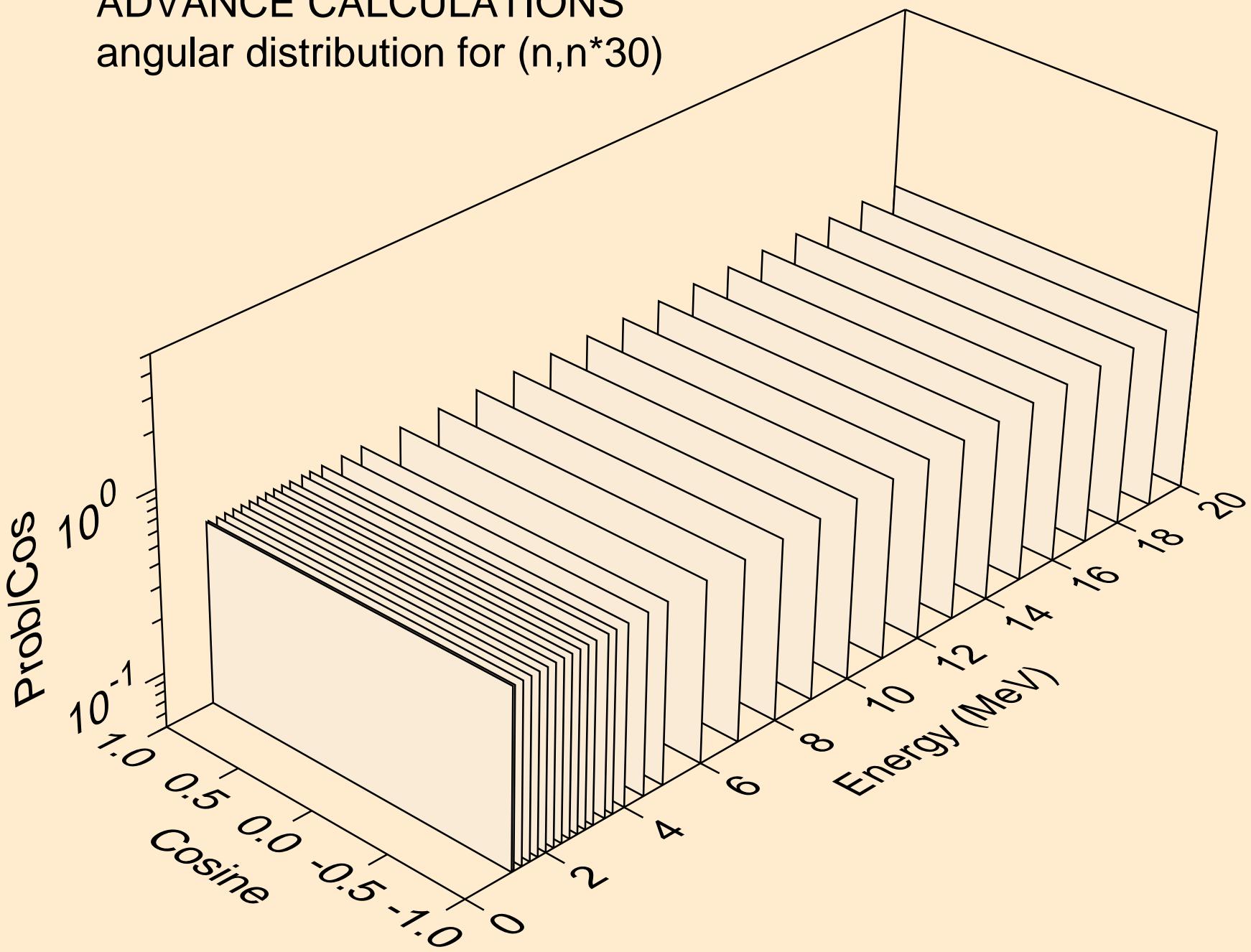
ADVANCE CALCULATIONS

angular distribution for (n,n^*29)



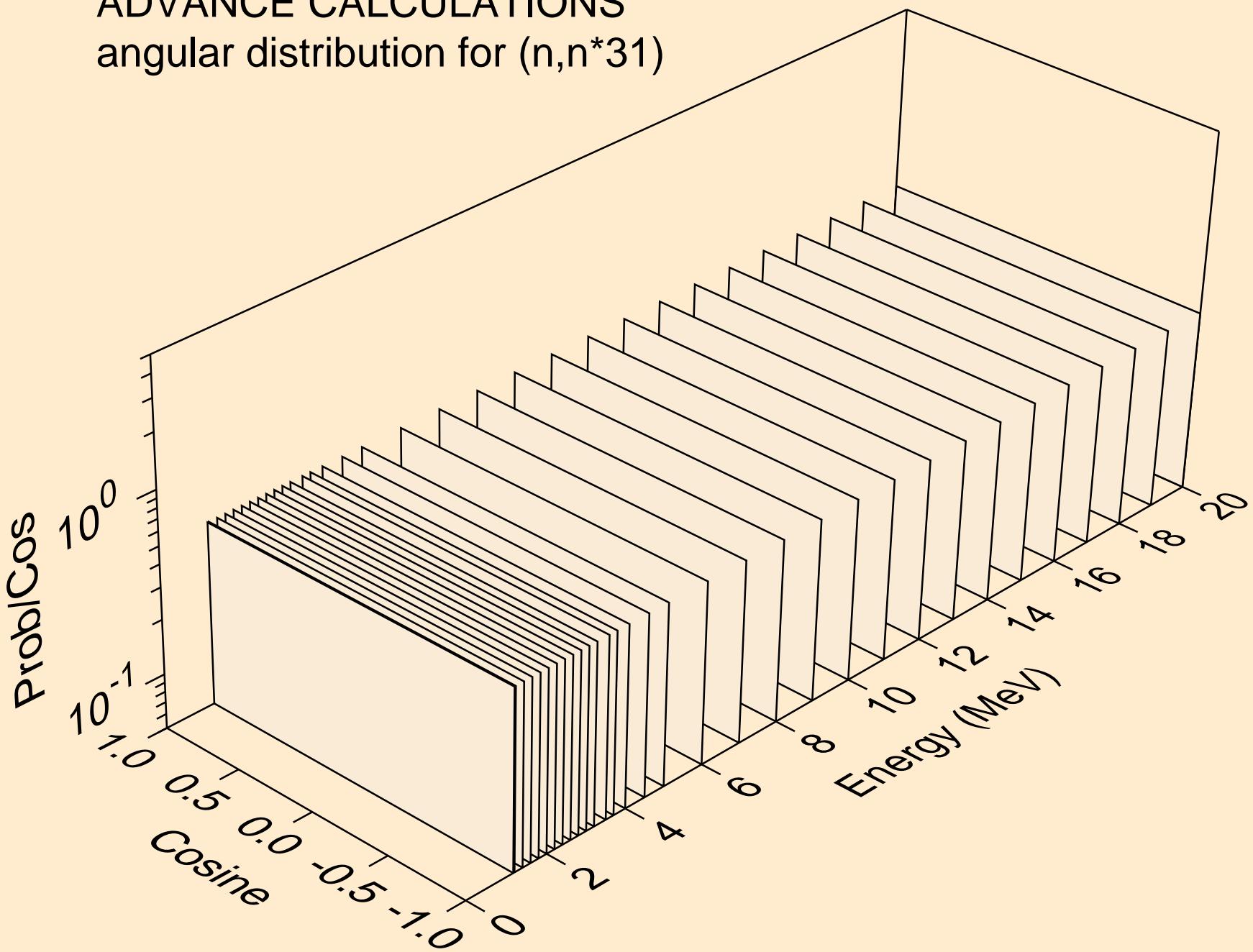
ADVANCE CALCULATIONS

angular distribution for (n,n*30)



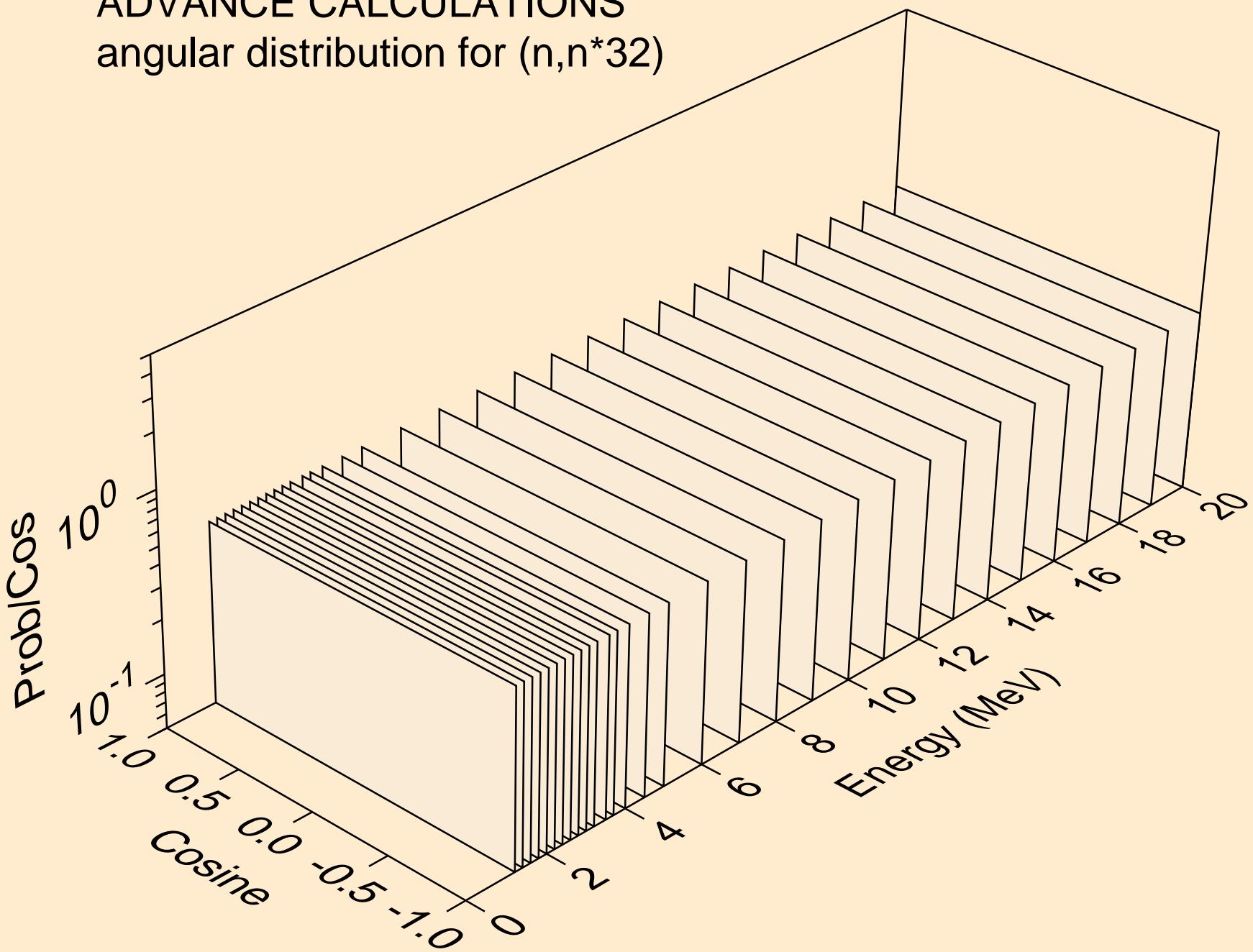
ADVANCE CALCULATIONS

angular distribution for (n,n*31)



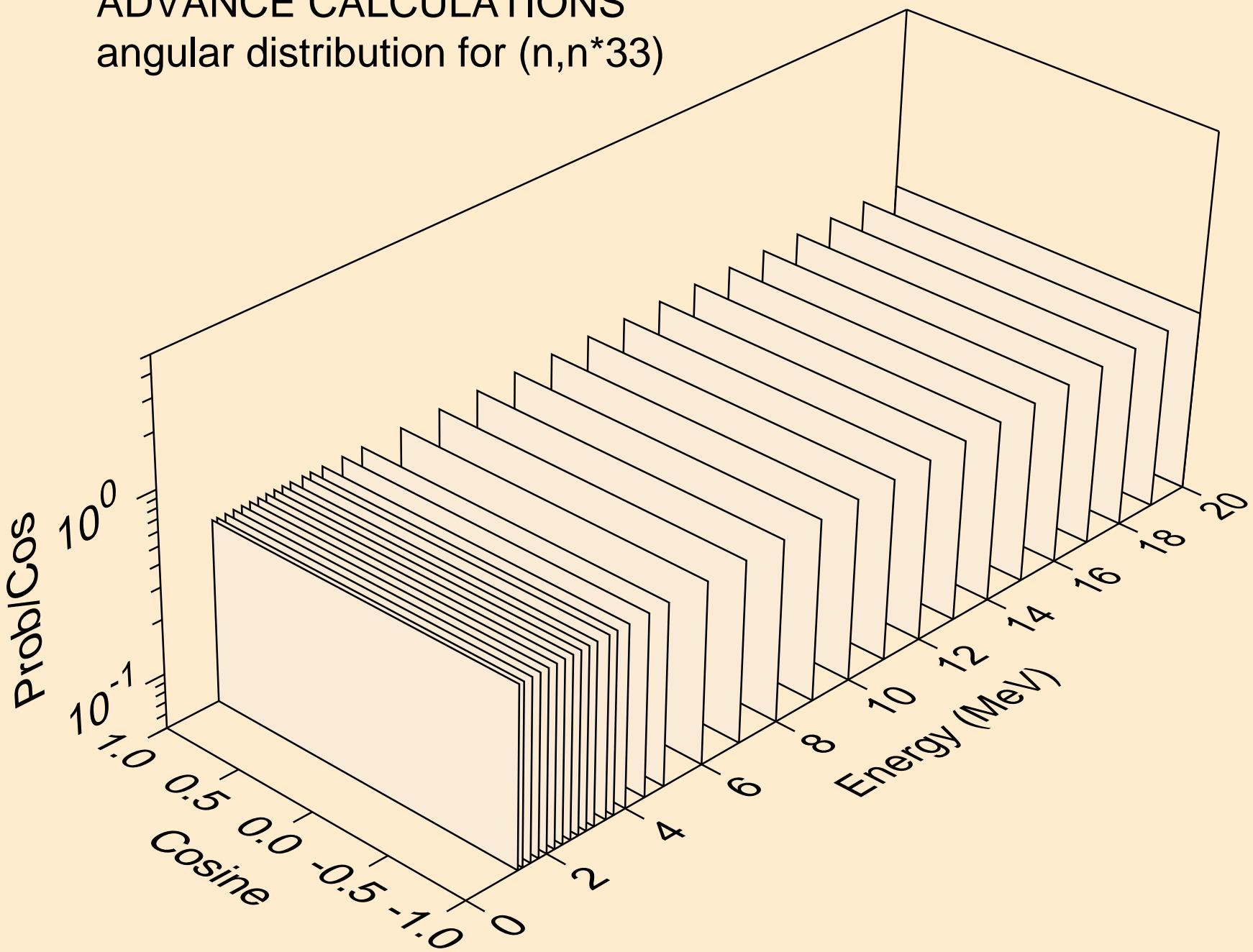
ADVANCE CALCULATIONS

angular distribution for (n,n^*32)



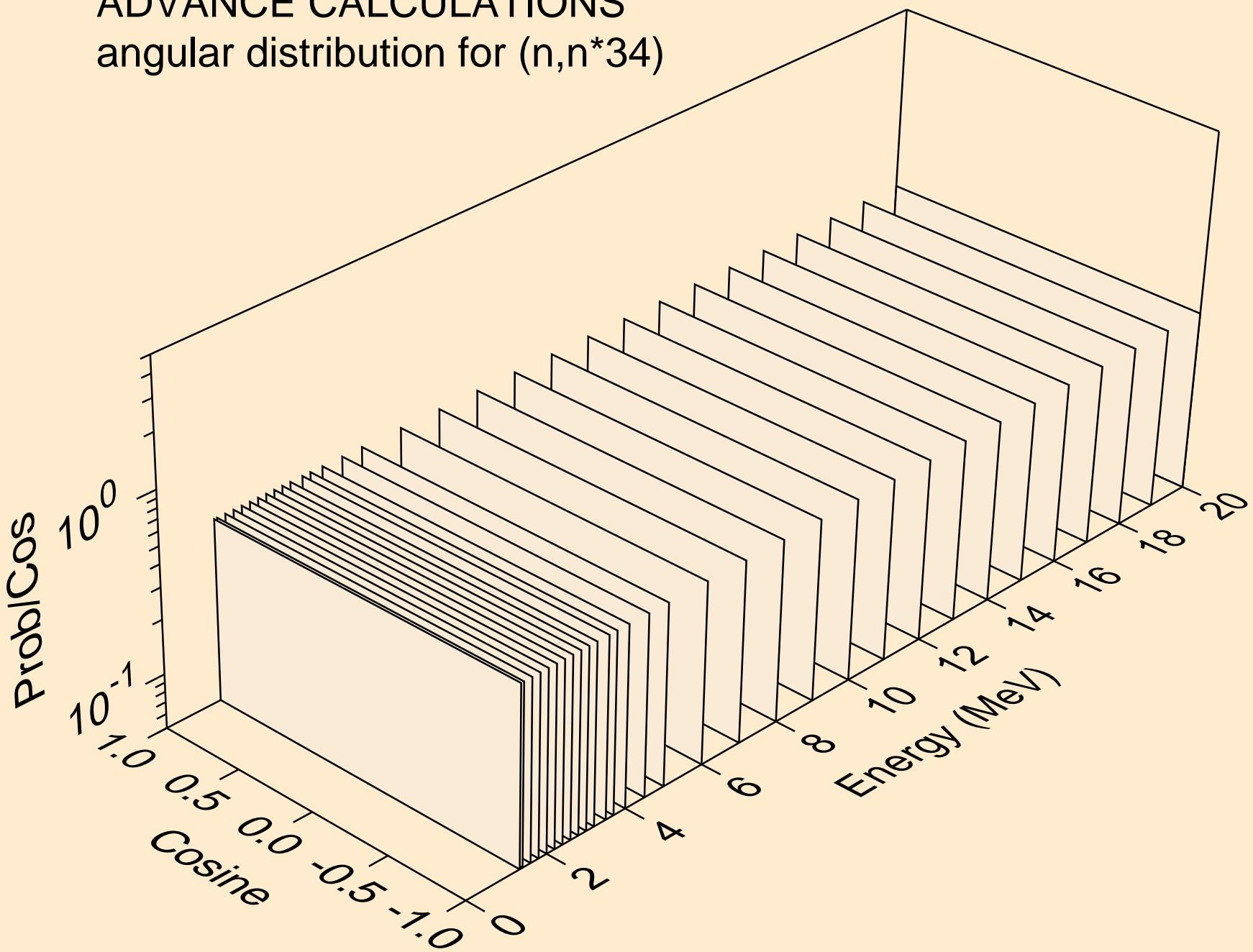
ADVANCE CALCULATIONS

angular distribution for (n, n^*33)



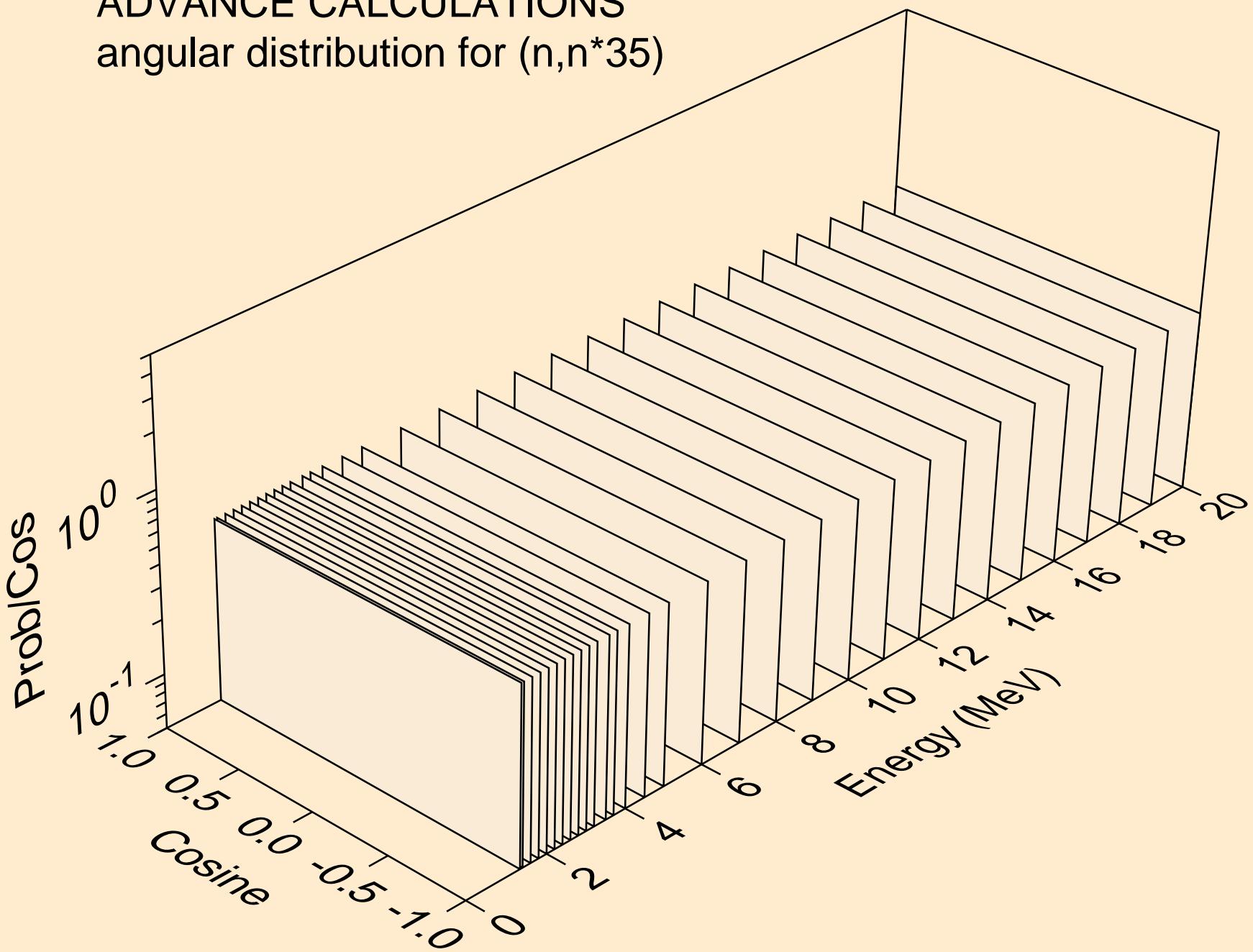
ADVANCE CALCULATIONS

angular distribution for (n,n^*34)



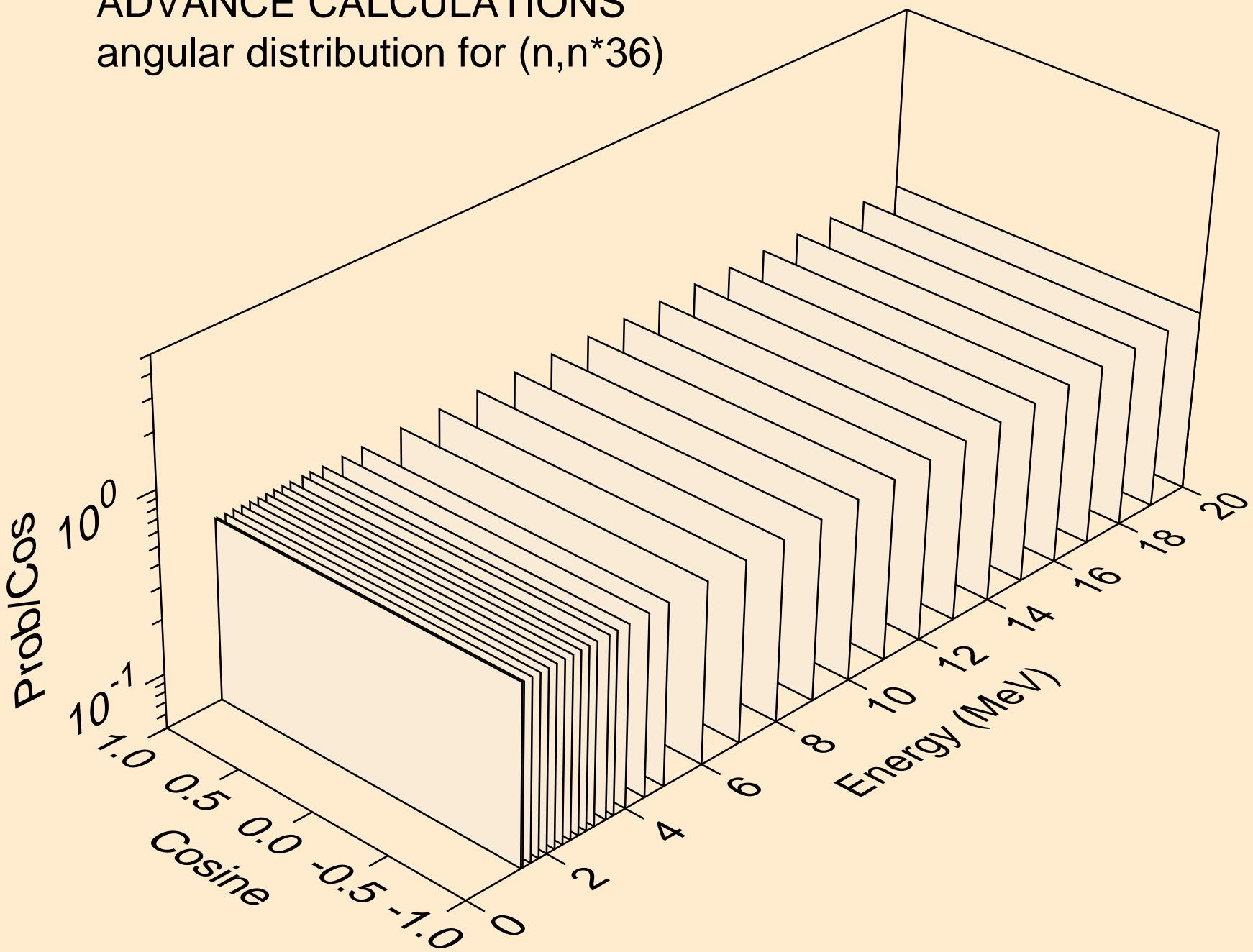
ADVANCE CALCULATIONS

angular distribution for (n,n*35)



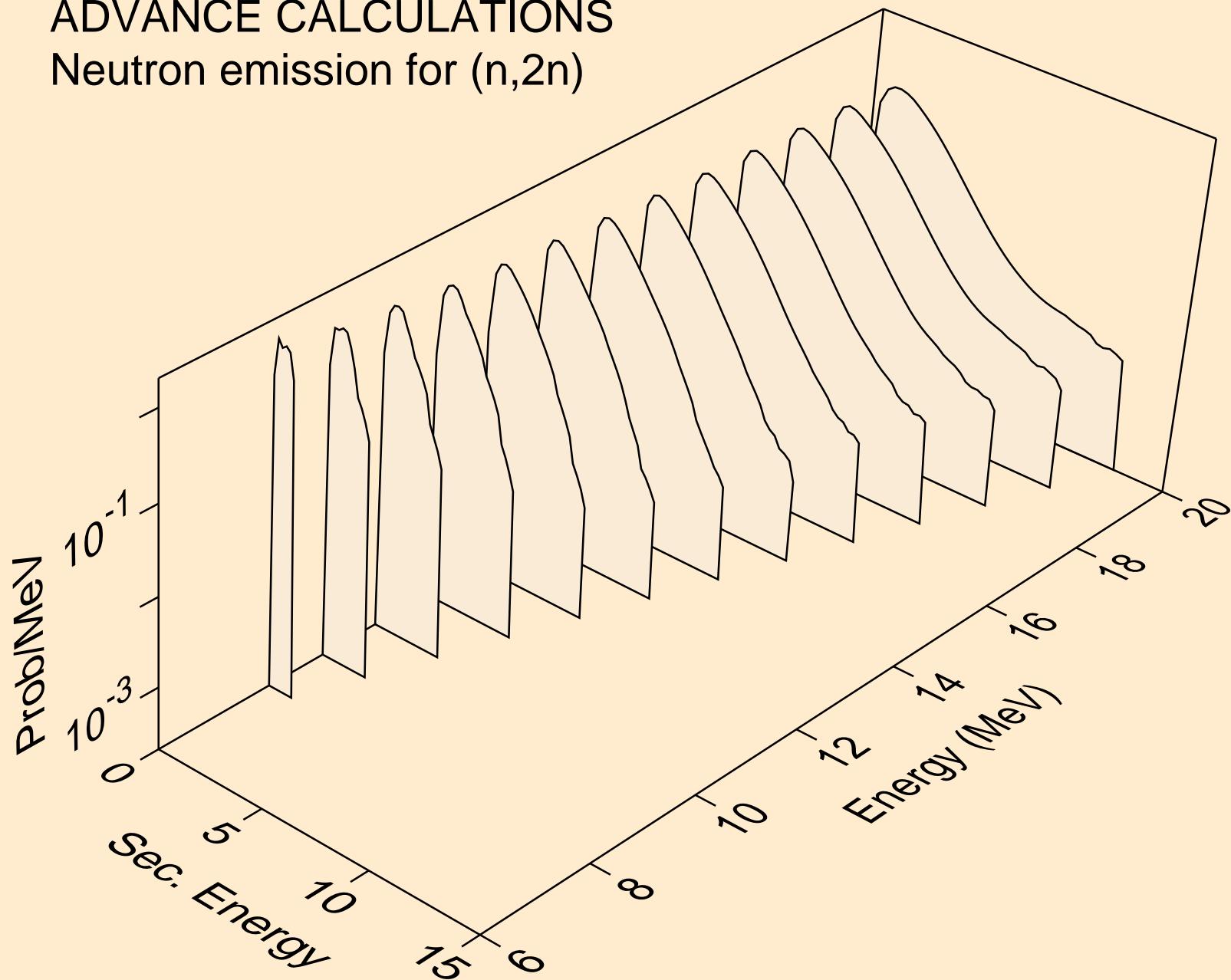
ADVANCE CALCULATIONS

angular distribution for (n,n^*36)



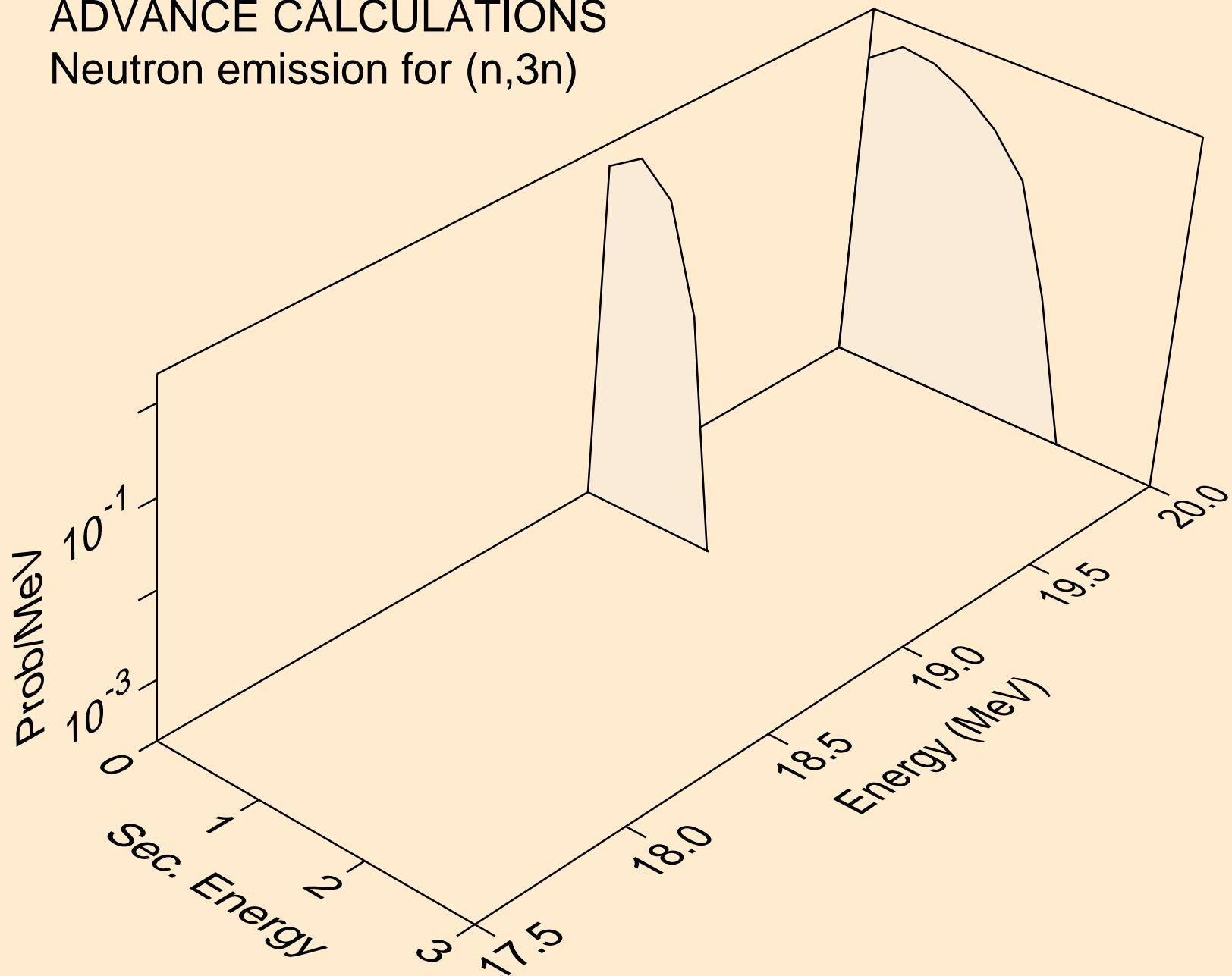
ADVANCE CALCULATIONS

Neutron emission for (n,2n)



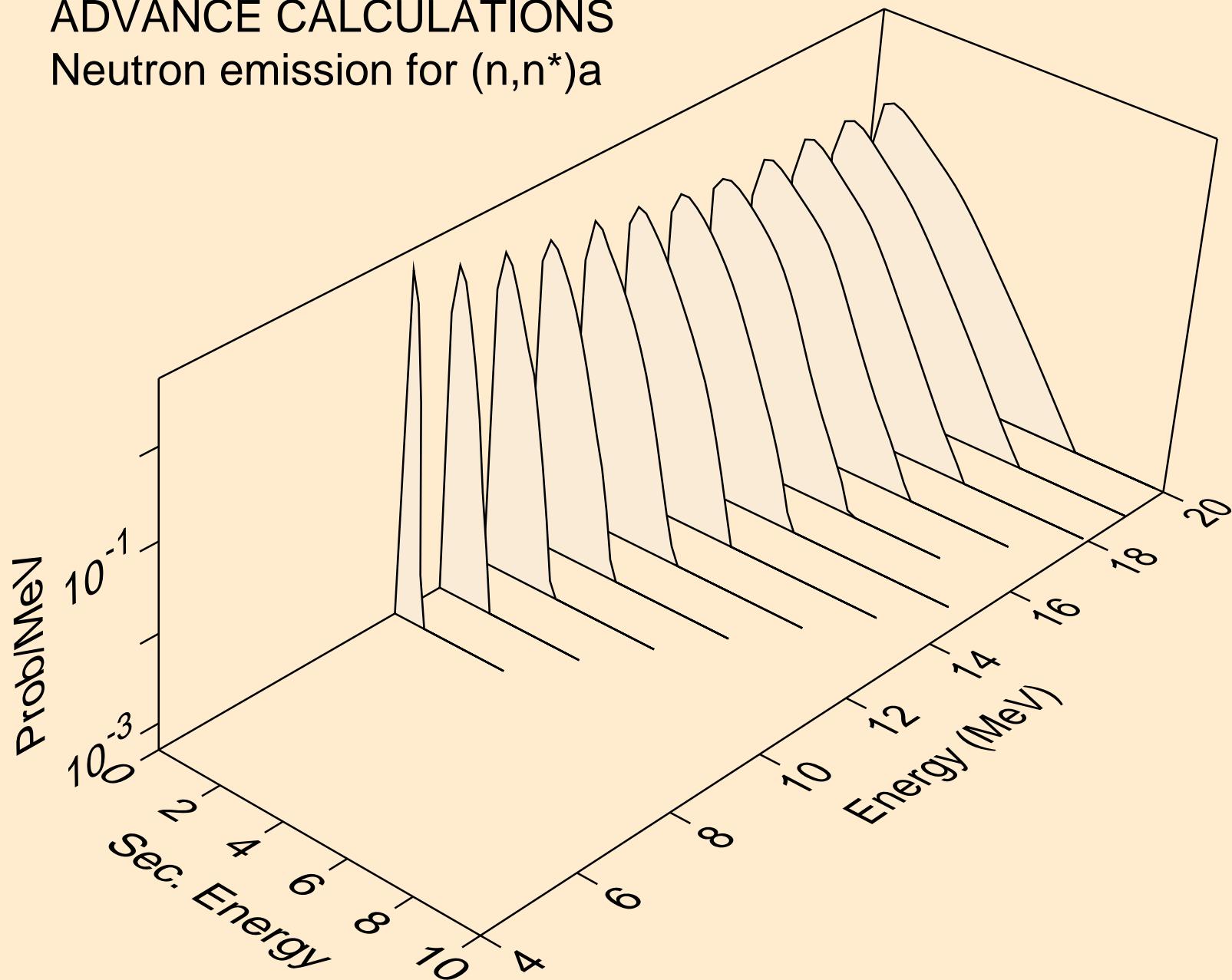
ADVANCE CALCULATIONS

Neutron emission for (n,3n)



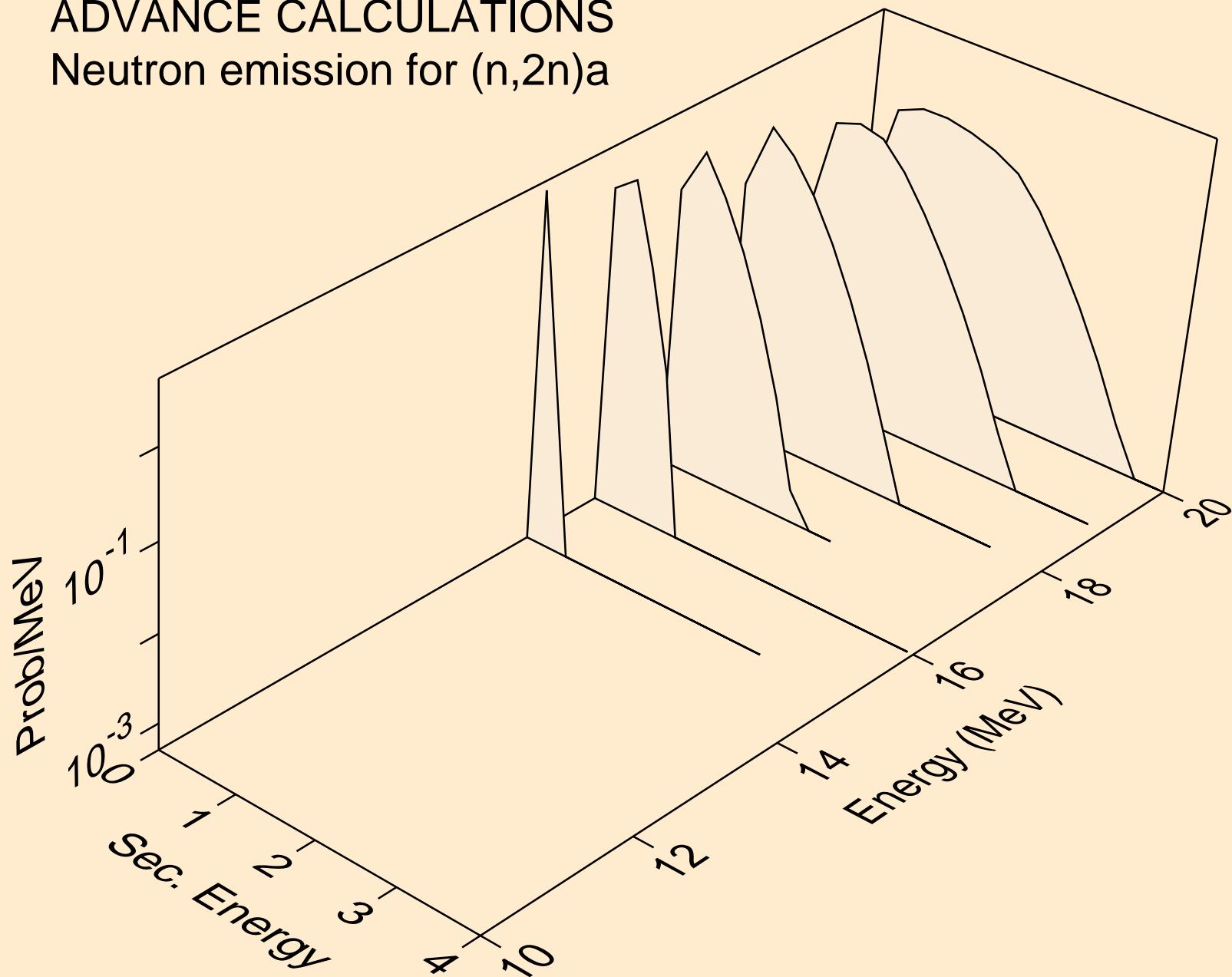
ADVANCE CALCULATIONS

Neutron emission for $(n,n^*)a$



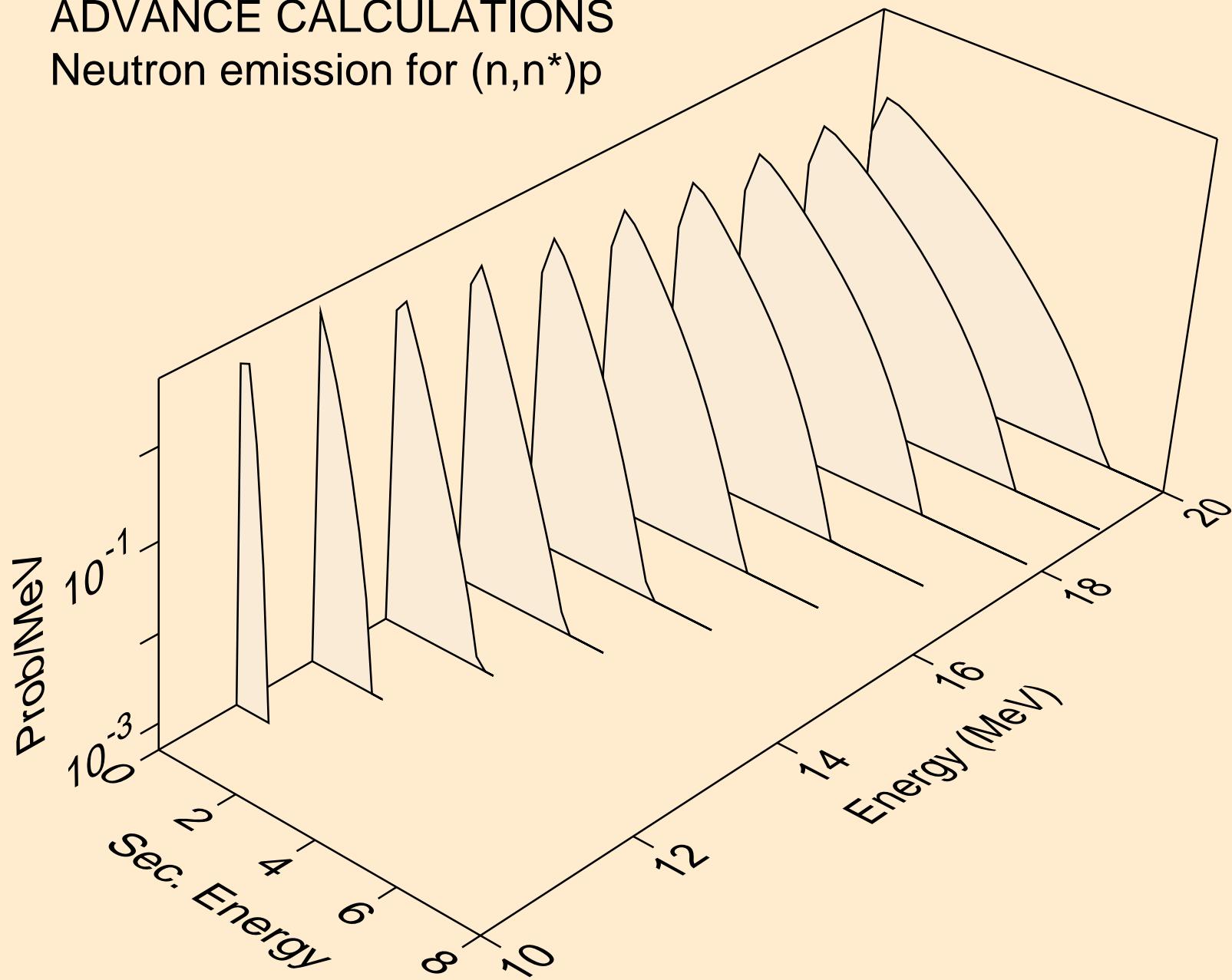
ADVANCE CALCULATIONS

Neutron emission for $(n,2n)a$



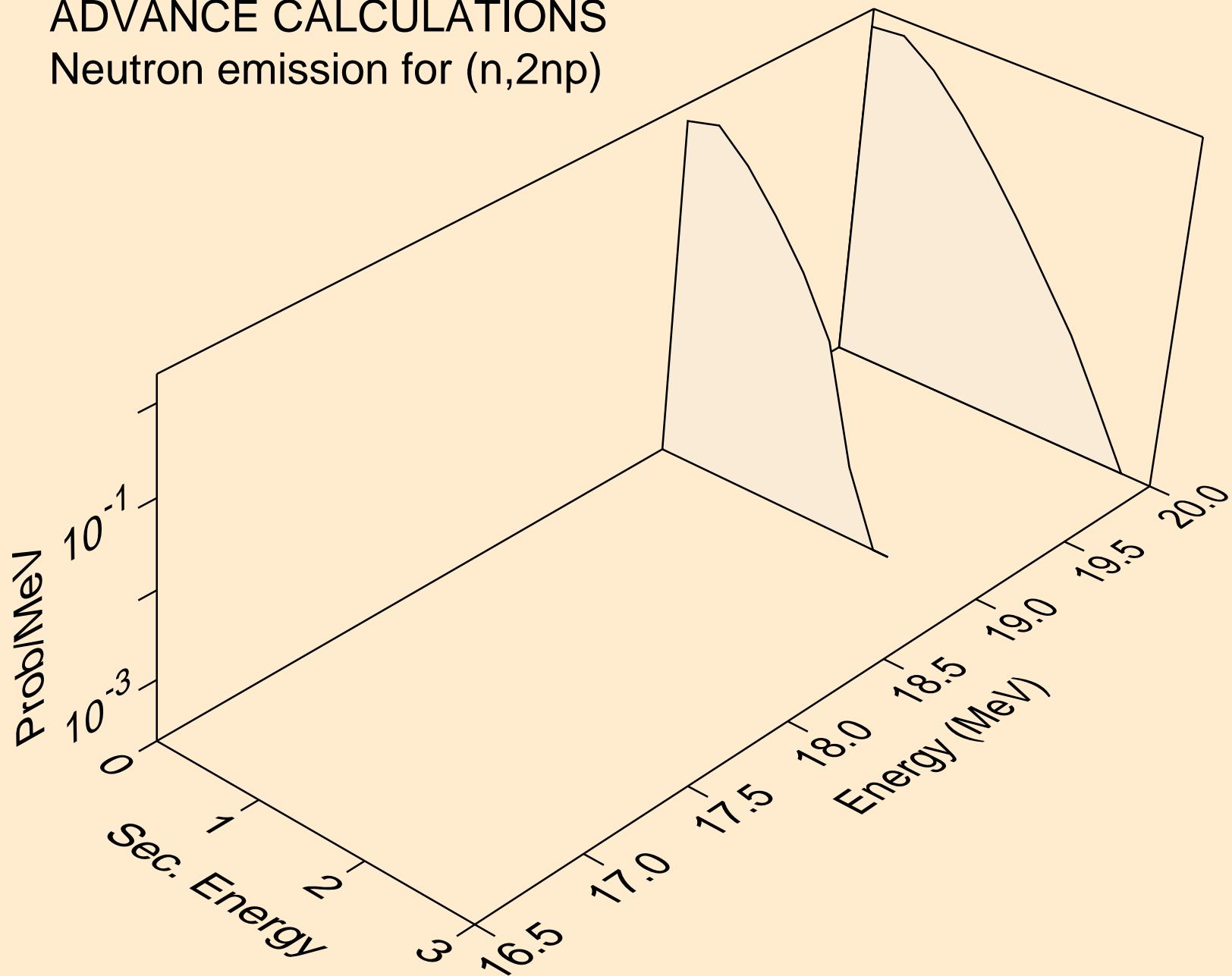
ADVANCE CALCULATIONS

Neutron emission for $(n,n^*)p$



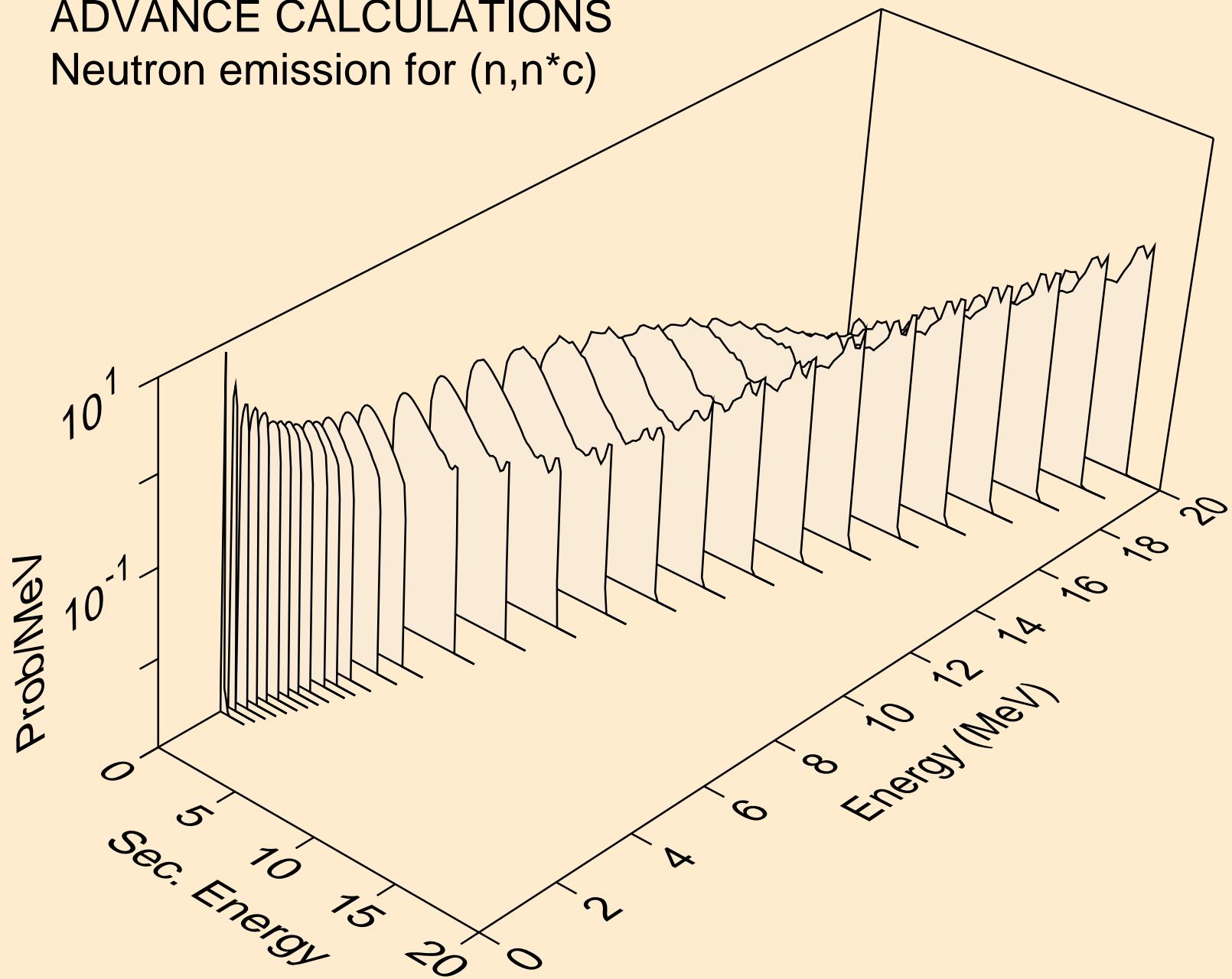
ADVANCE CALCULATIONS

Neutron emission for (n,2np)



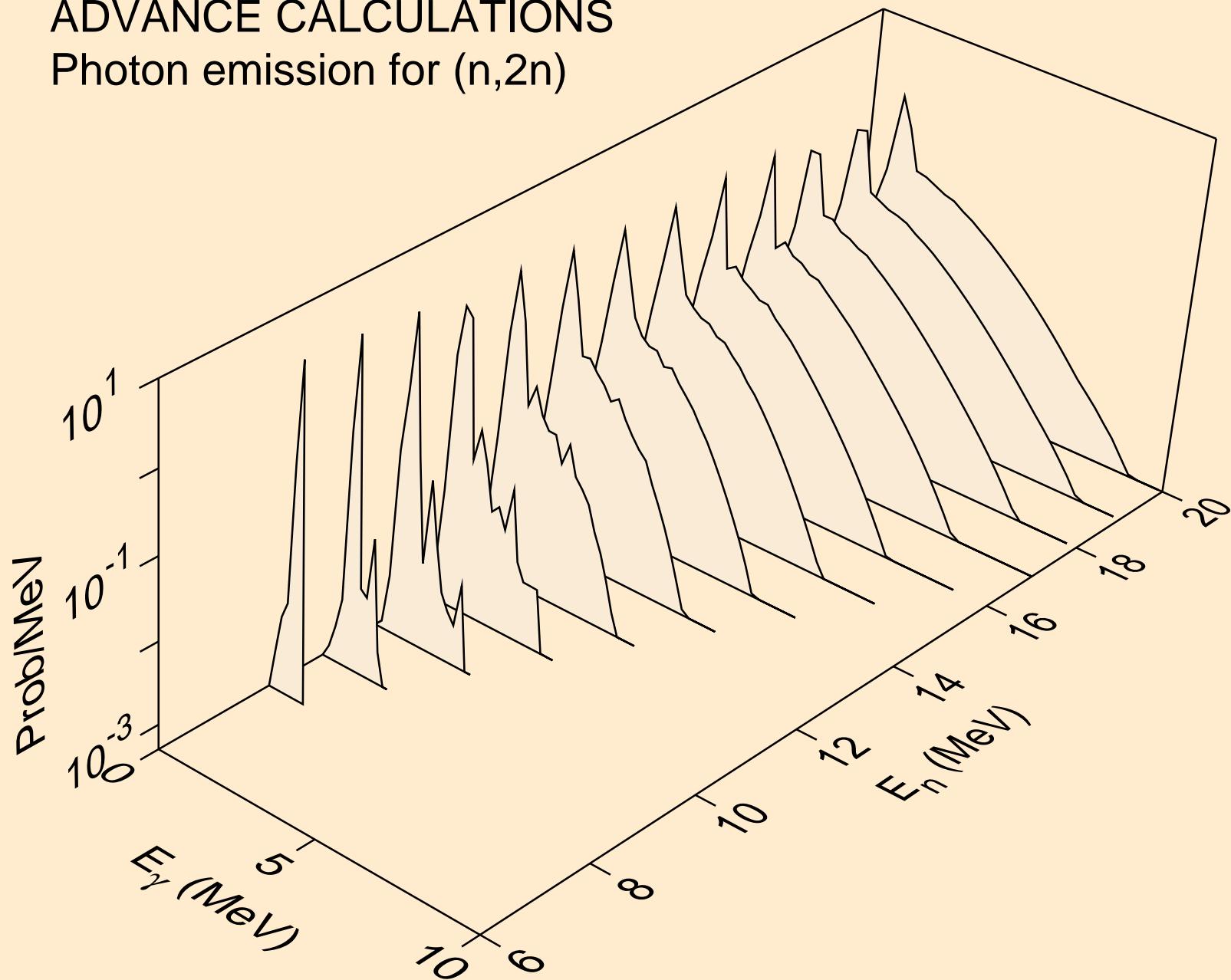
ADVANCE CALCULATIONS

Neutron emission for (n,n^*c)



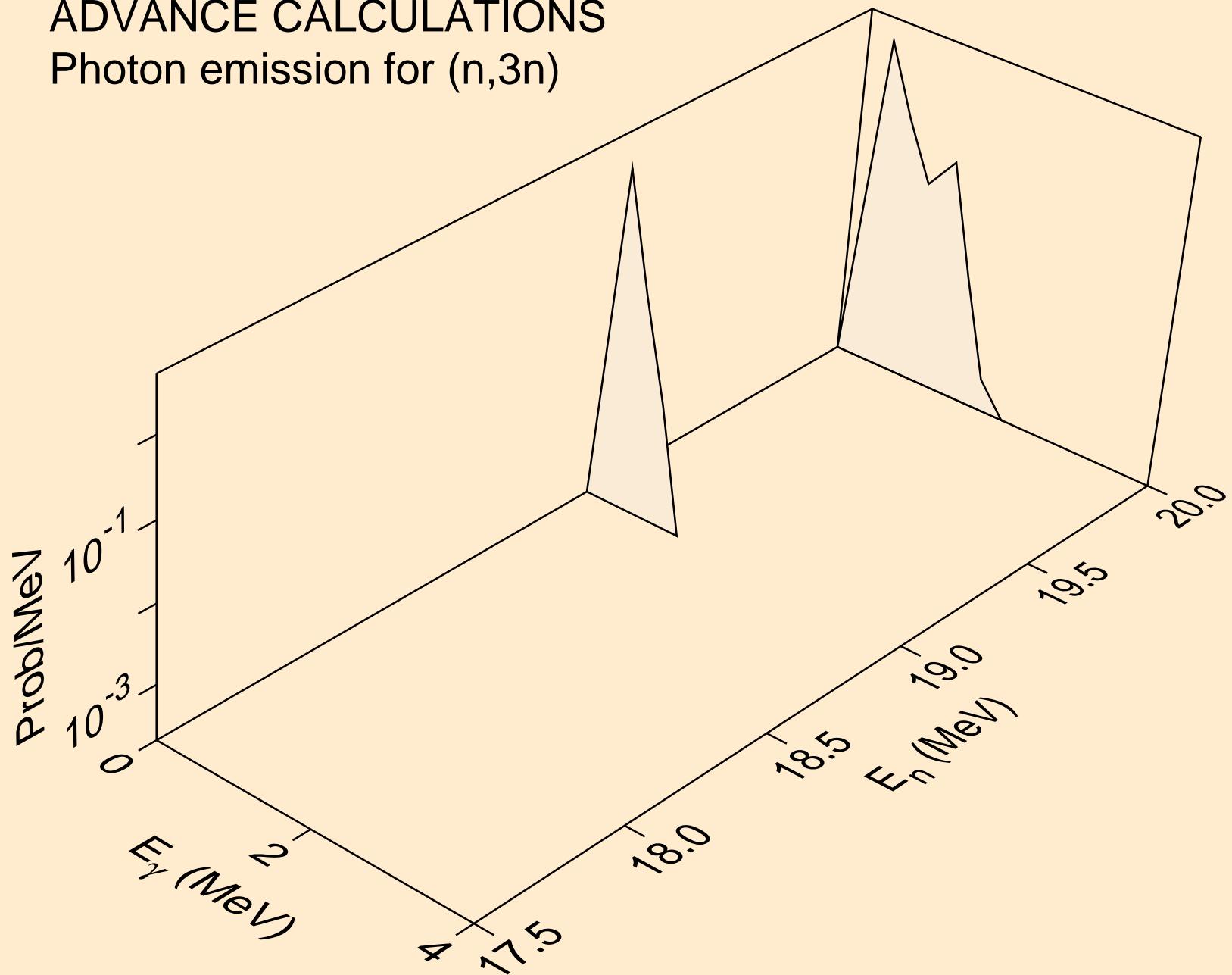
ADVANCE CALCULATIONS

Photon emission for (n,2n)



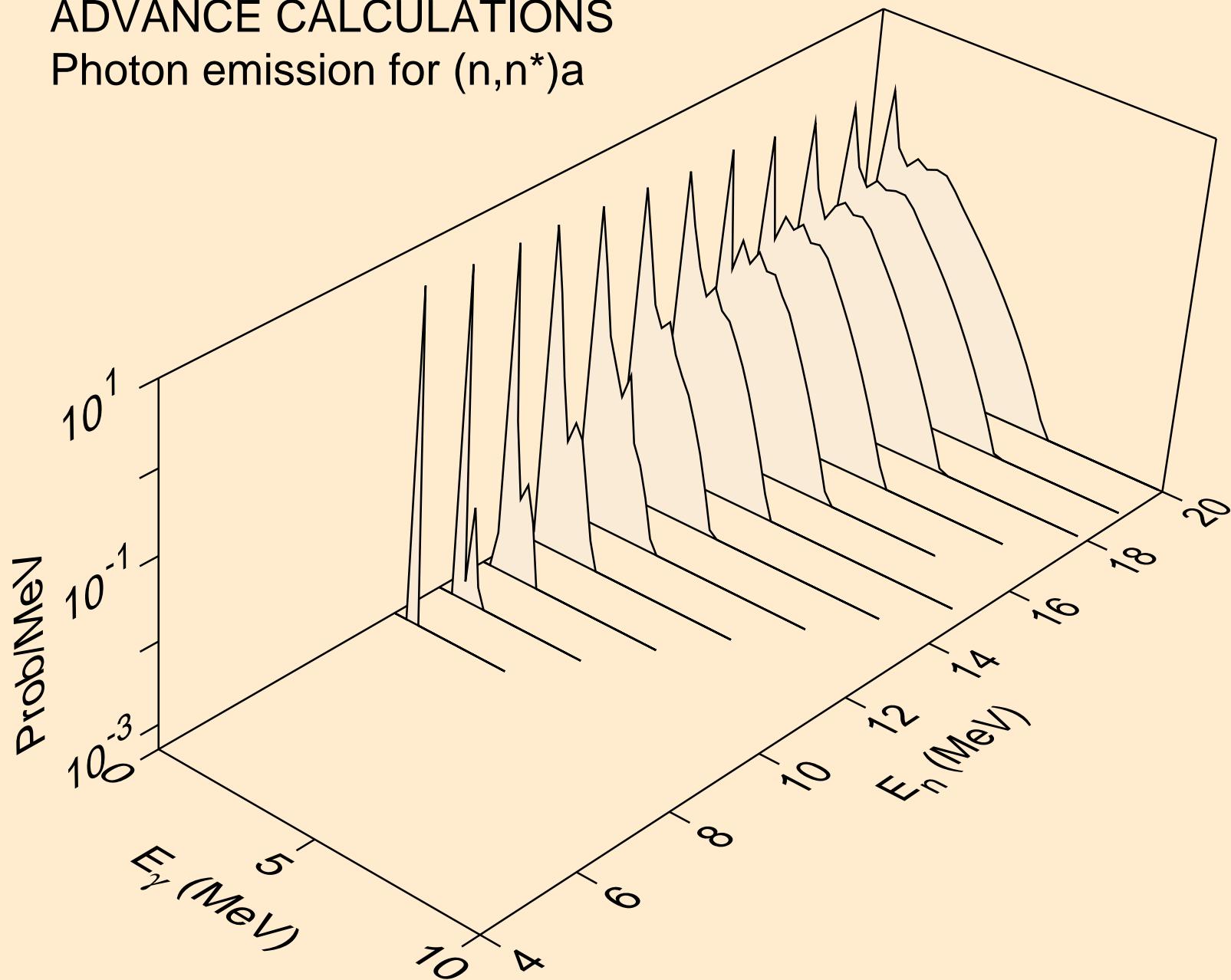
ADVANCE CALCULATIONS

Photon emission for (n,3n)



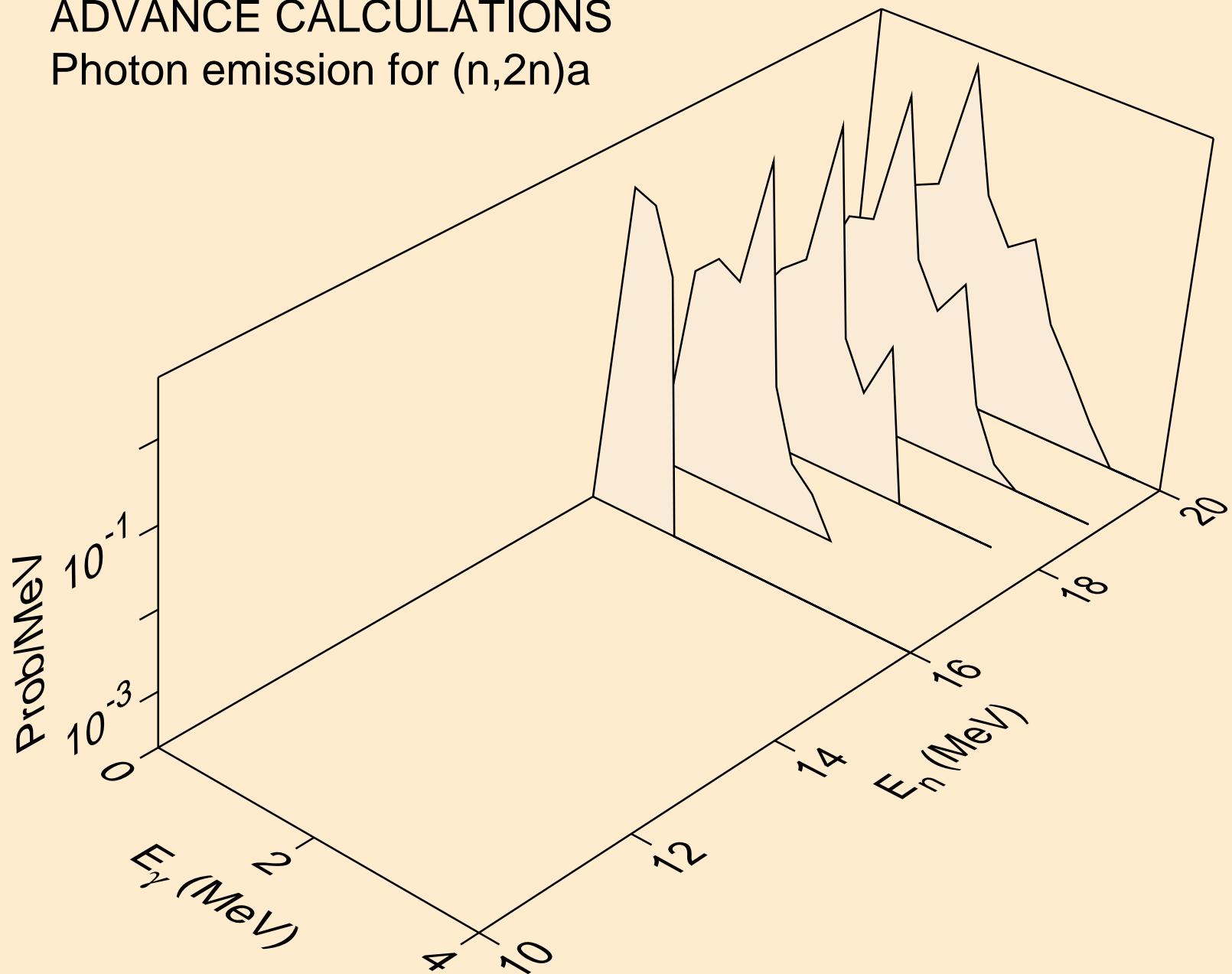
ADVANCE CALCULATIONS

Photon emission for $(n,n^*)a$



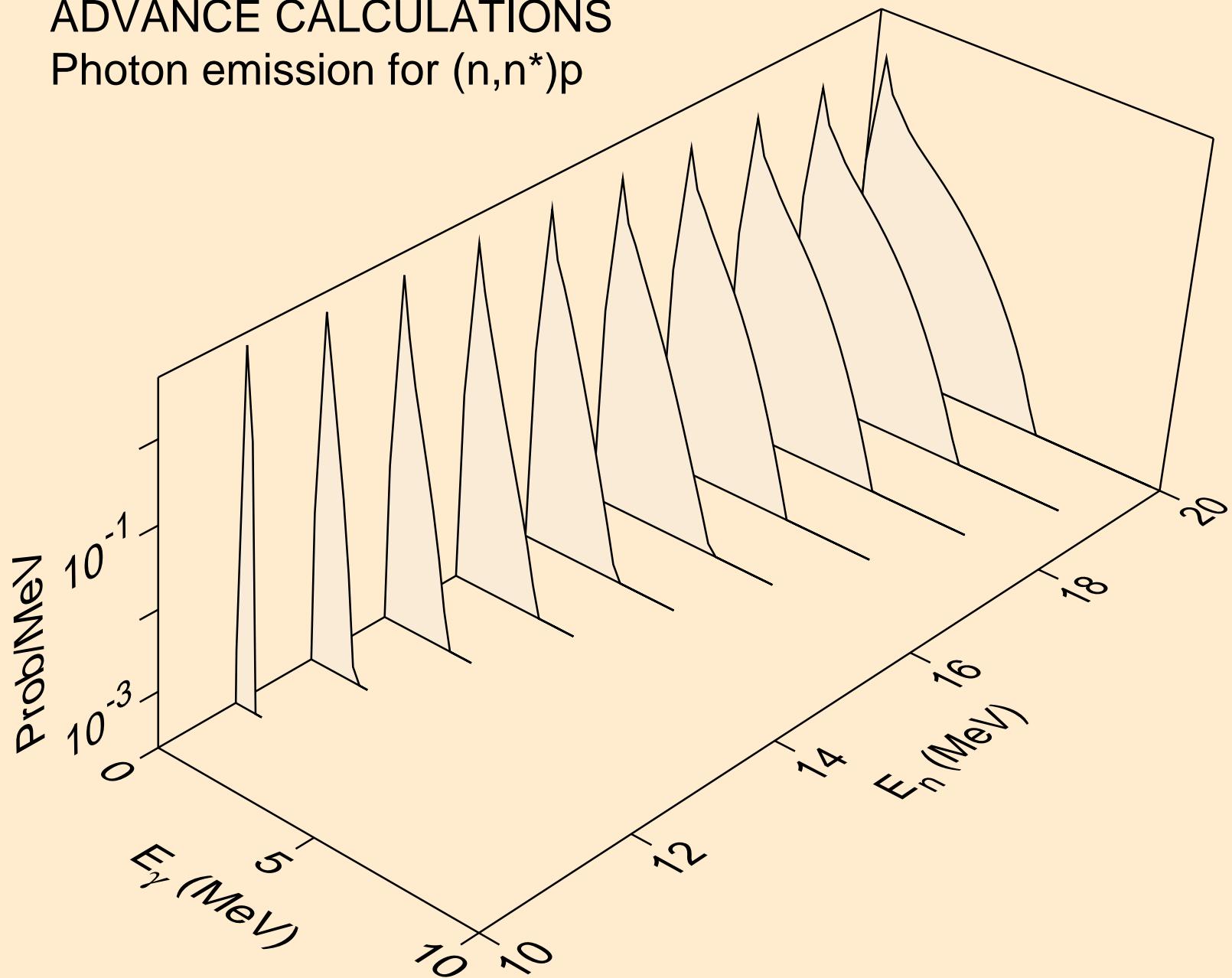
ADVANCE CALCULATIONS

Photon emission for $(n,2n)a$



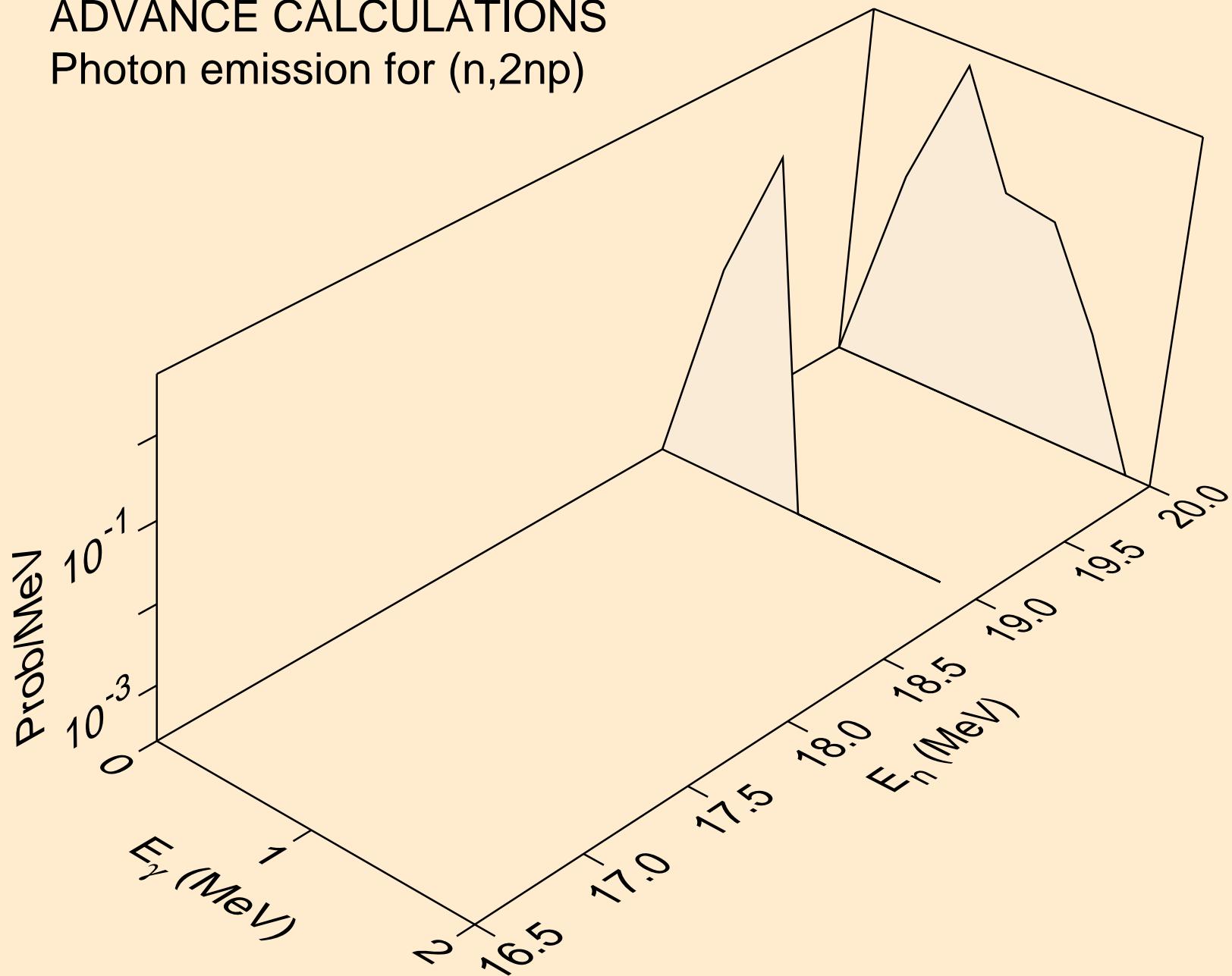
ADVANCE CALCULATIONS

Photon emission for $(n,n^*)p$



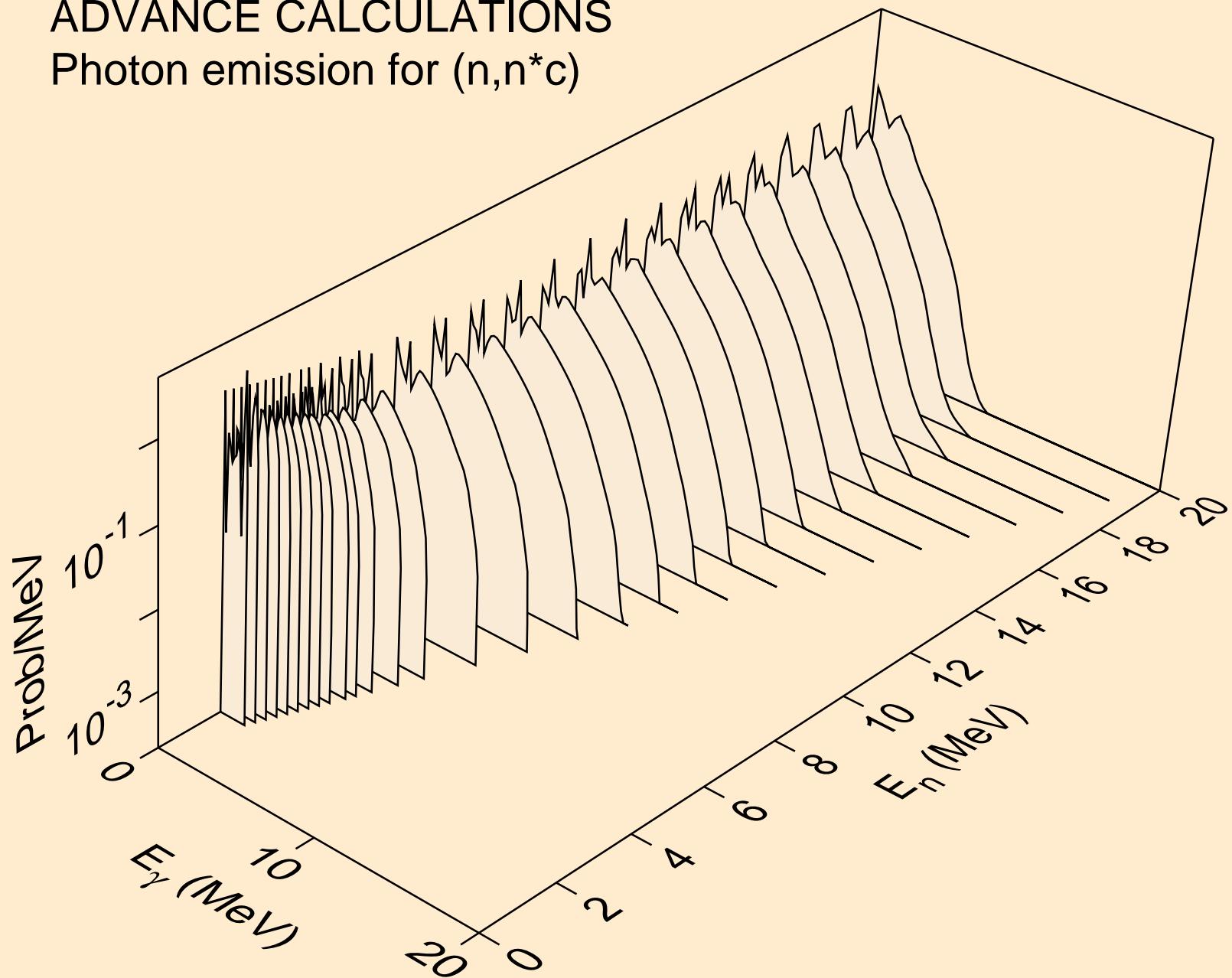
ADVANCE CALCULATIONS

Photon emission for (n,2np)



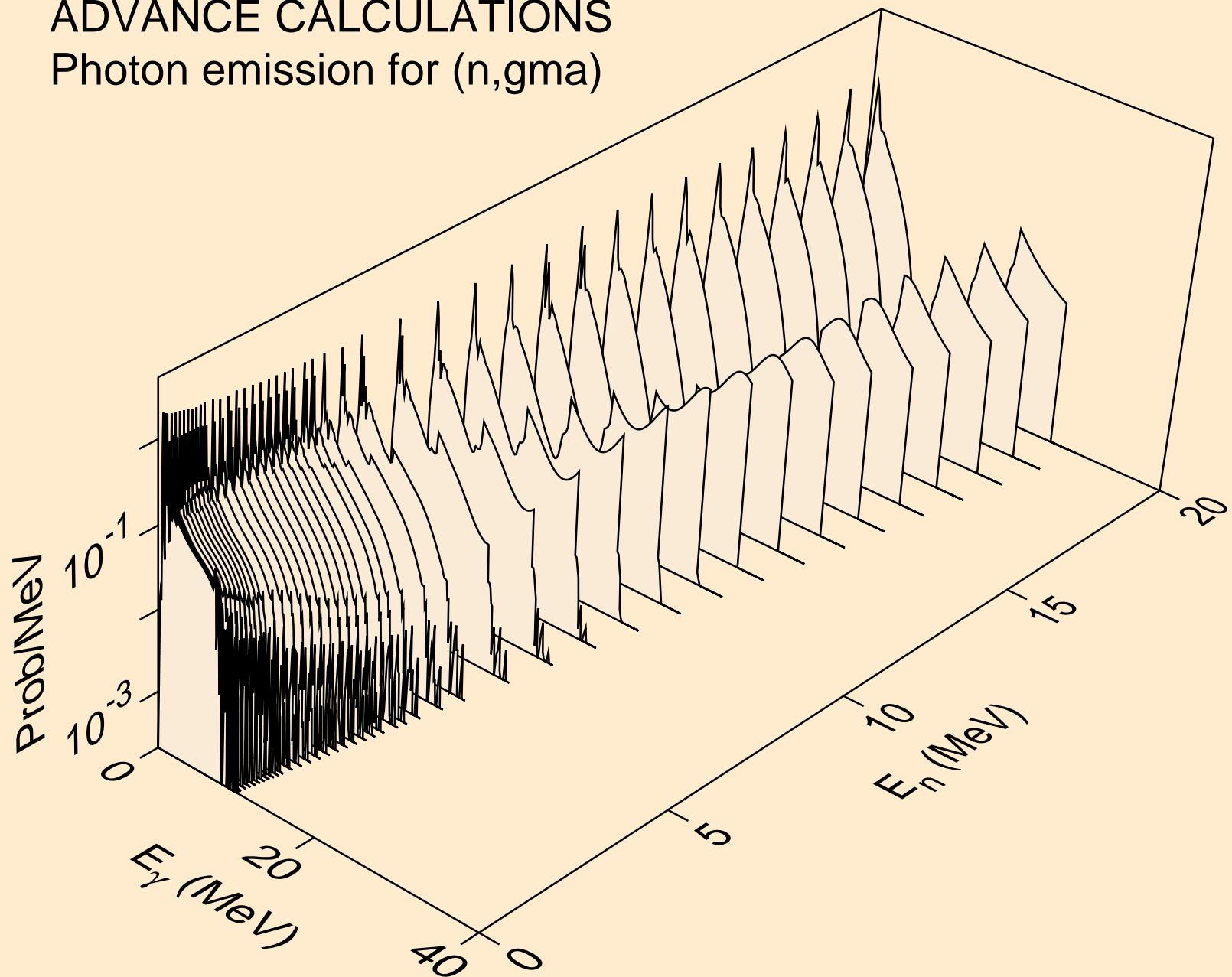
ADVANCE CALCULATIONS

Photon emission for (n,n^*c)



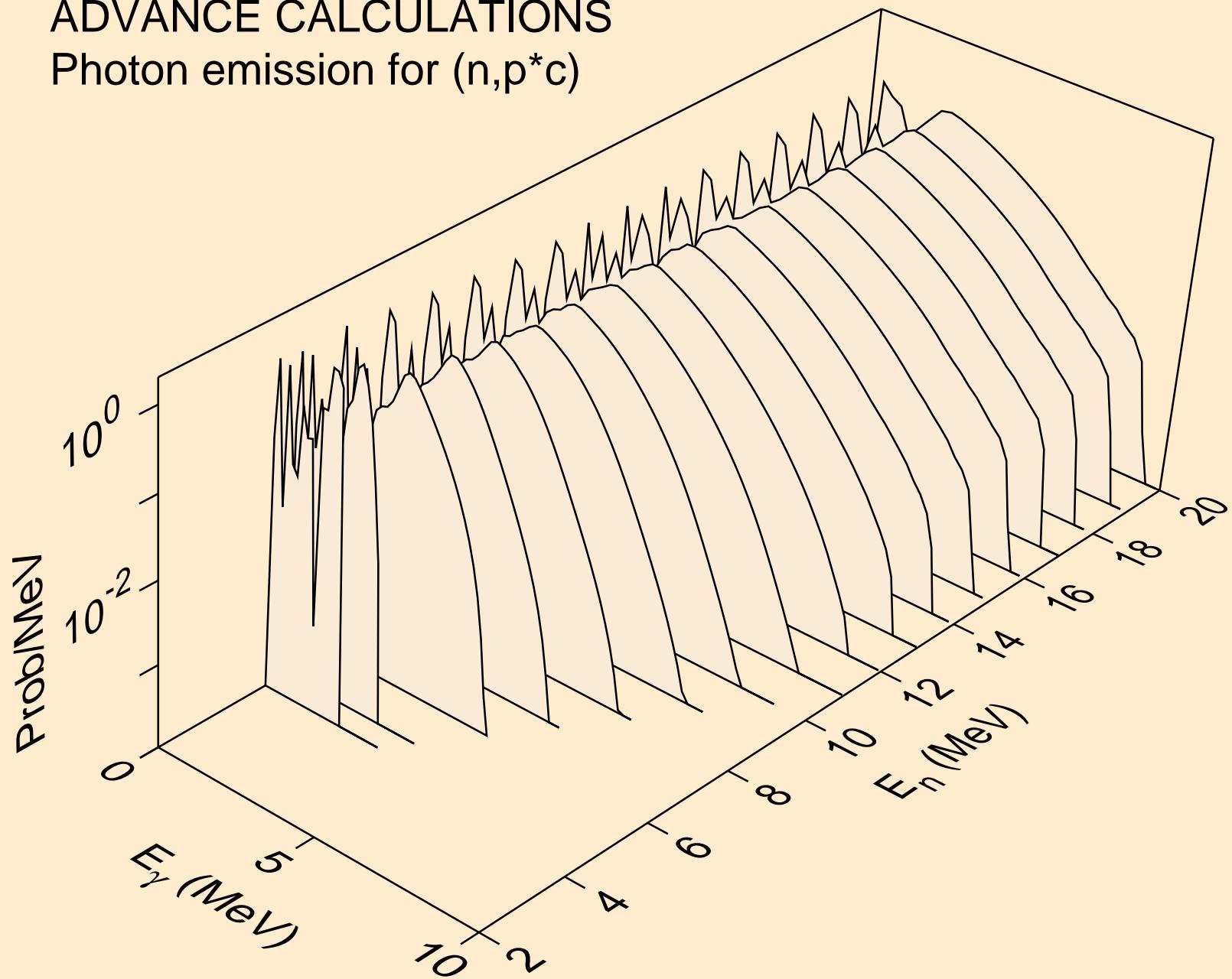
ADVANCE CALCULATIONS

Photon emission for (n,gma)



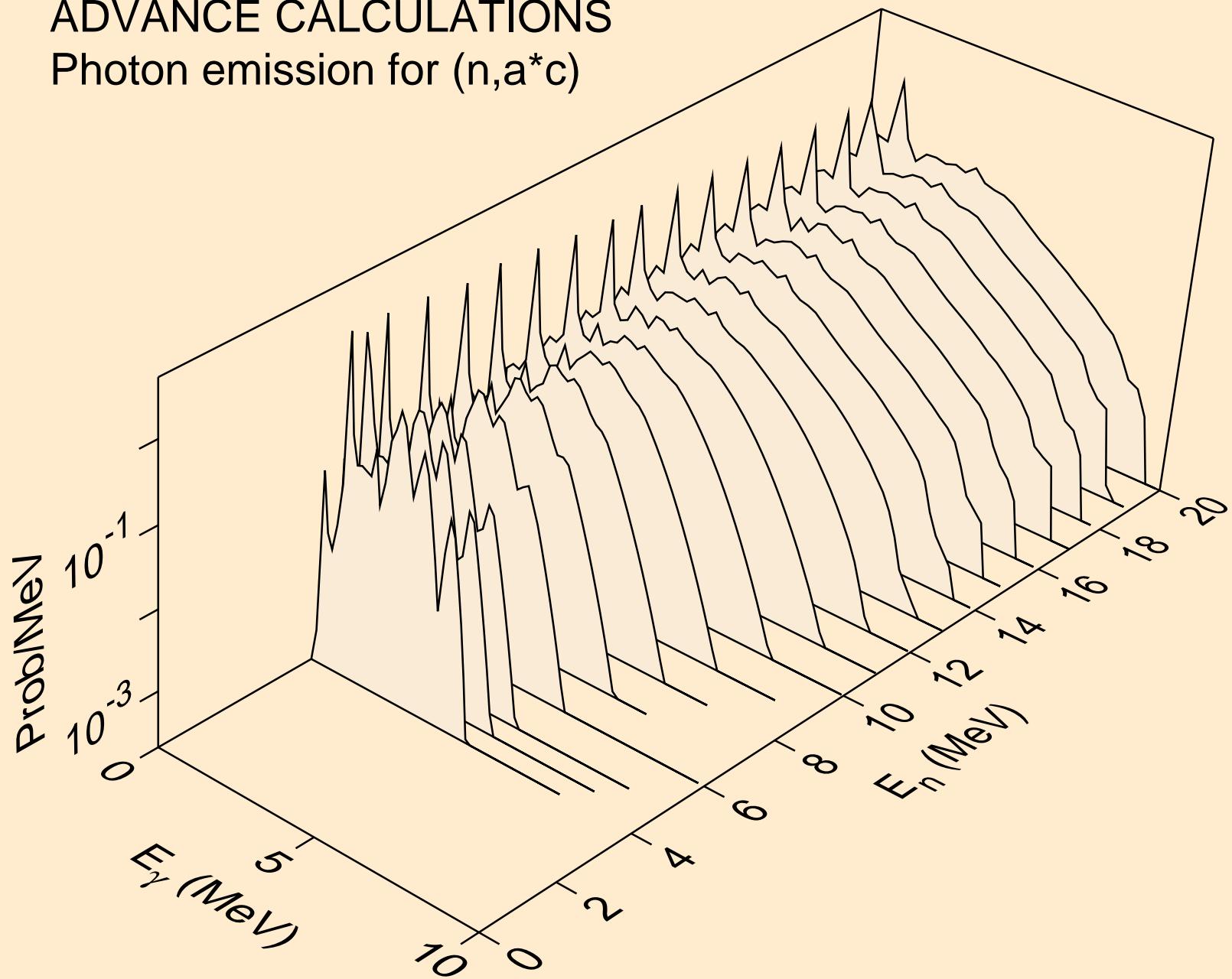
ADVANCE CALCULATIONS

Photon emission for $(n, p^* c)$



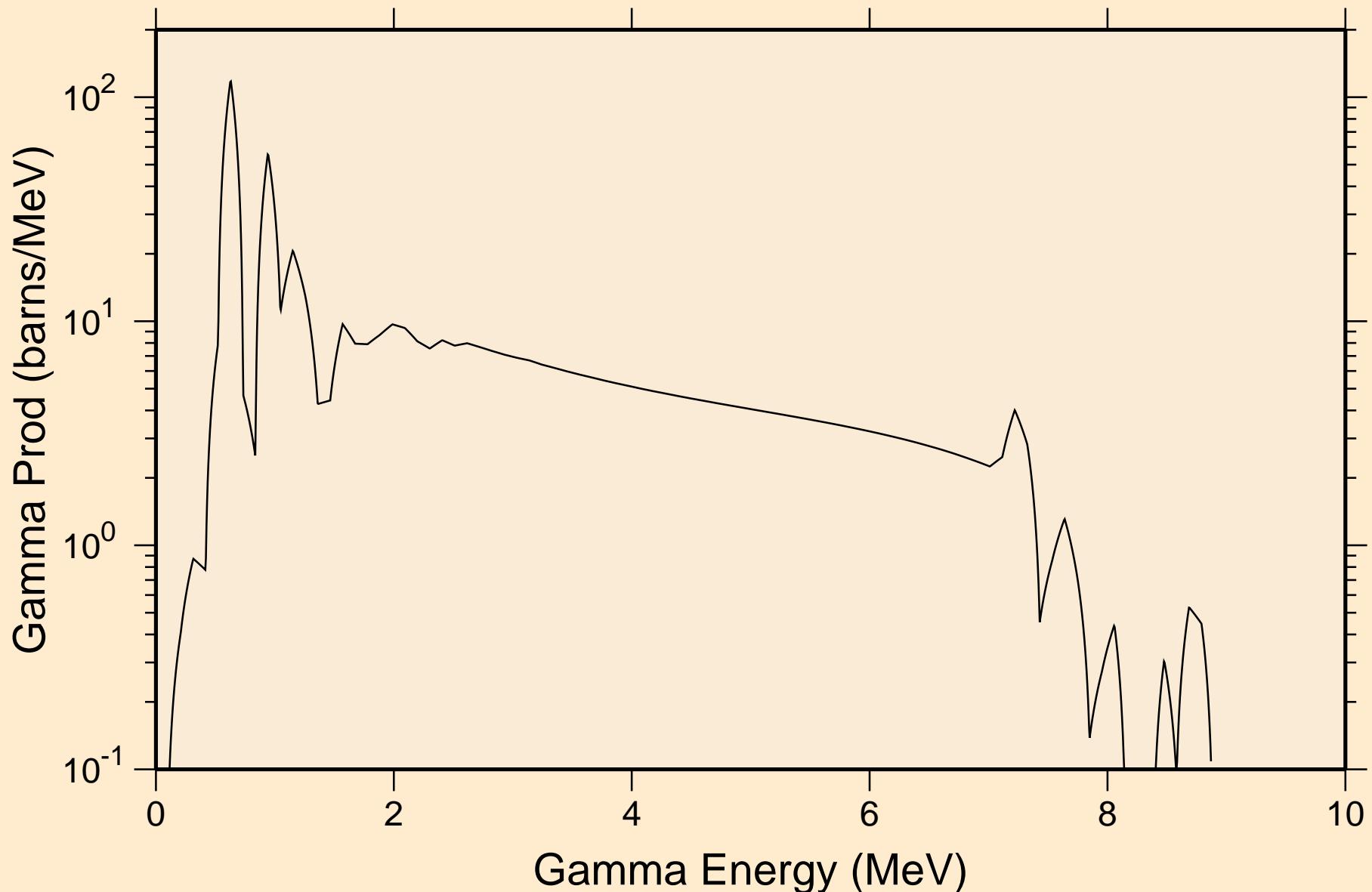
ADVANCE CALCULATIONS

Photon emission for (n, a^*c)

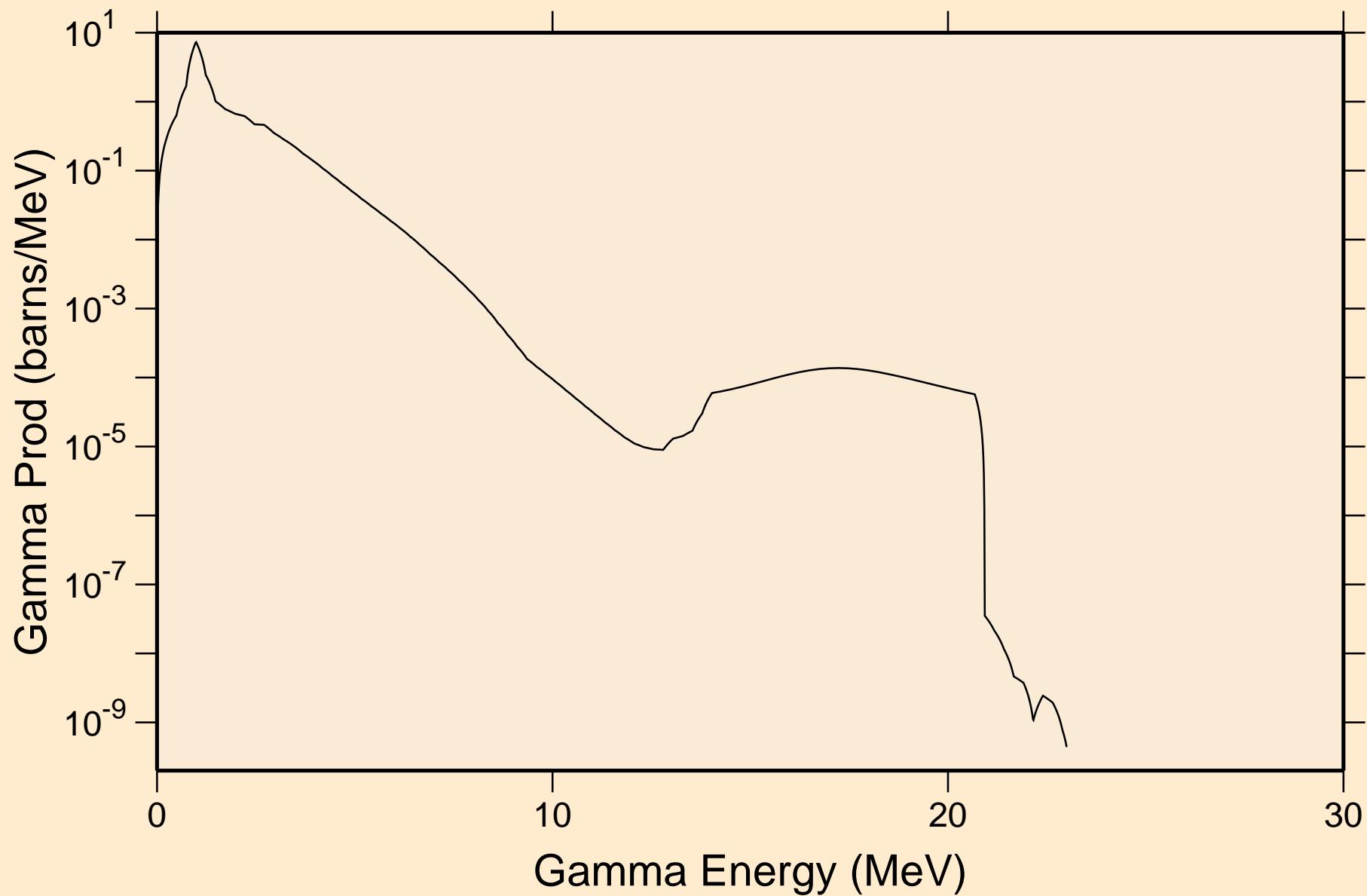


ADVANCE CALCULATIONS

thermal capture photon spectrum

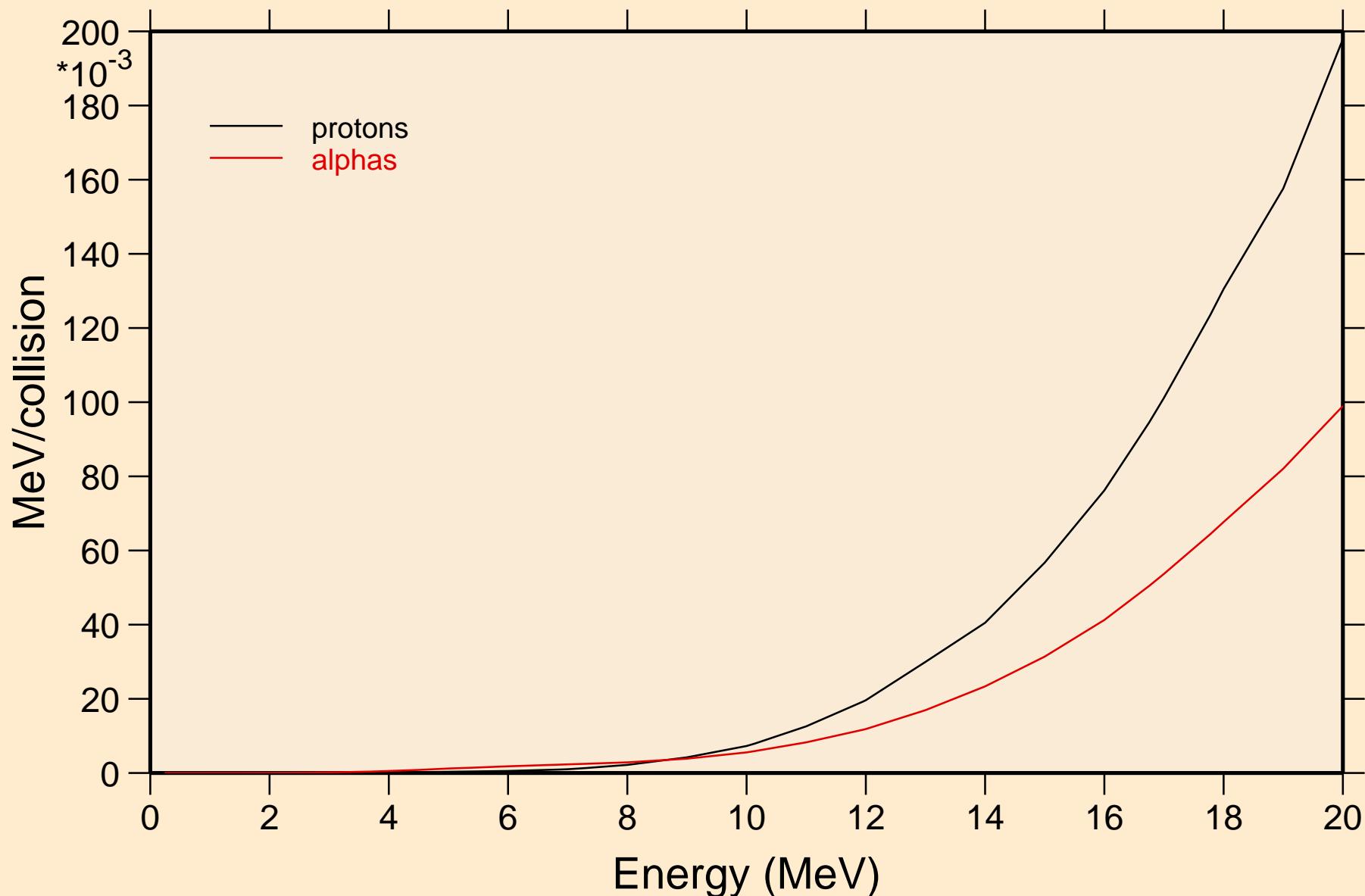


ADVANCE CALCULATIONS
14 MeV photon spectrum



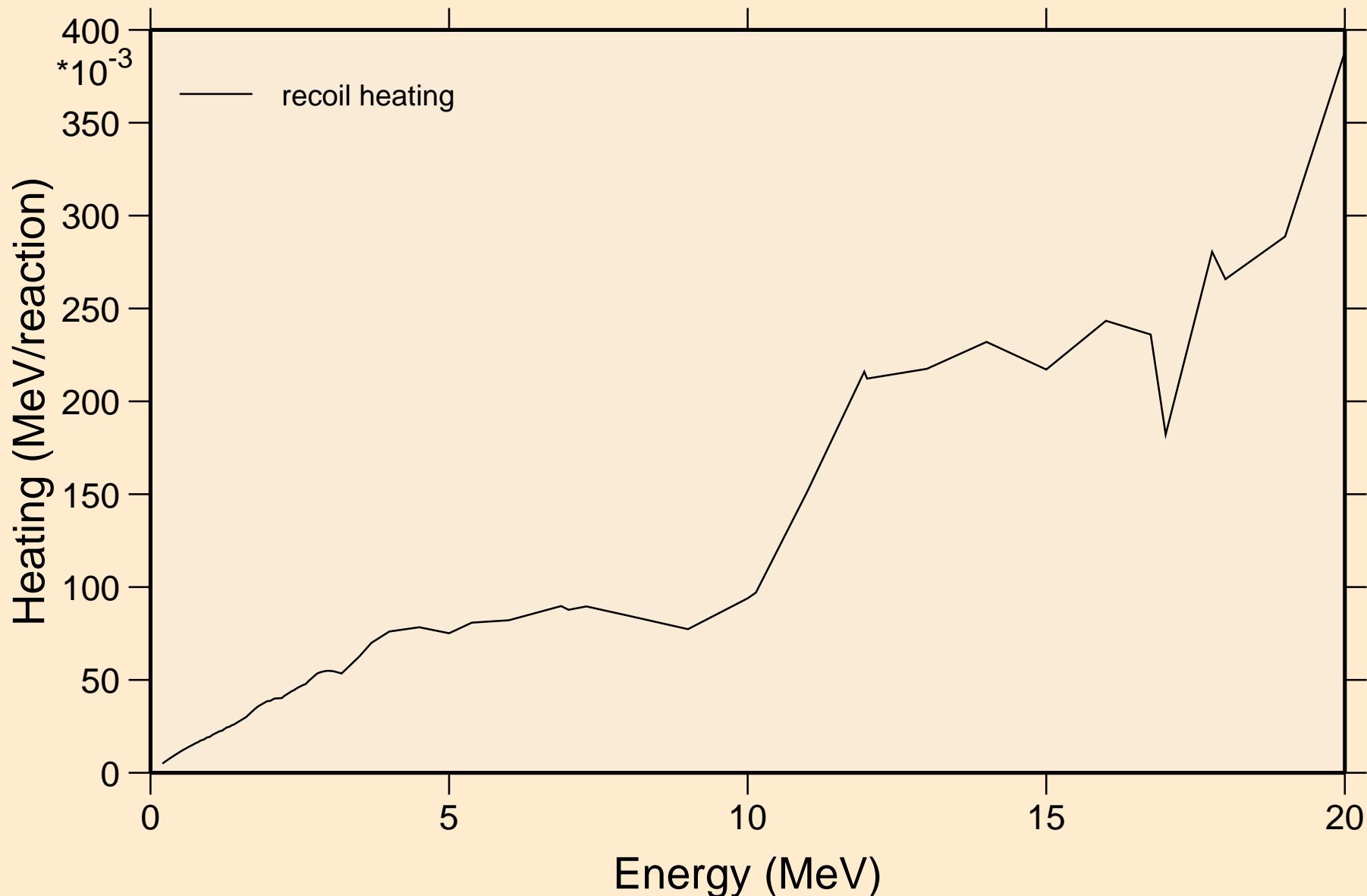
ADVANCE CALCULATIONS

Particle heating contributions



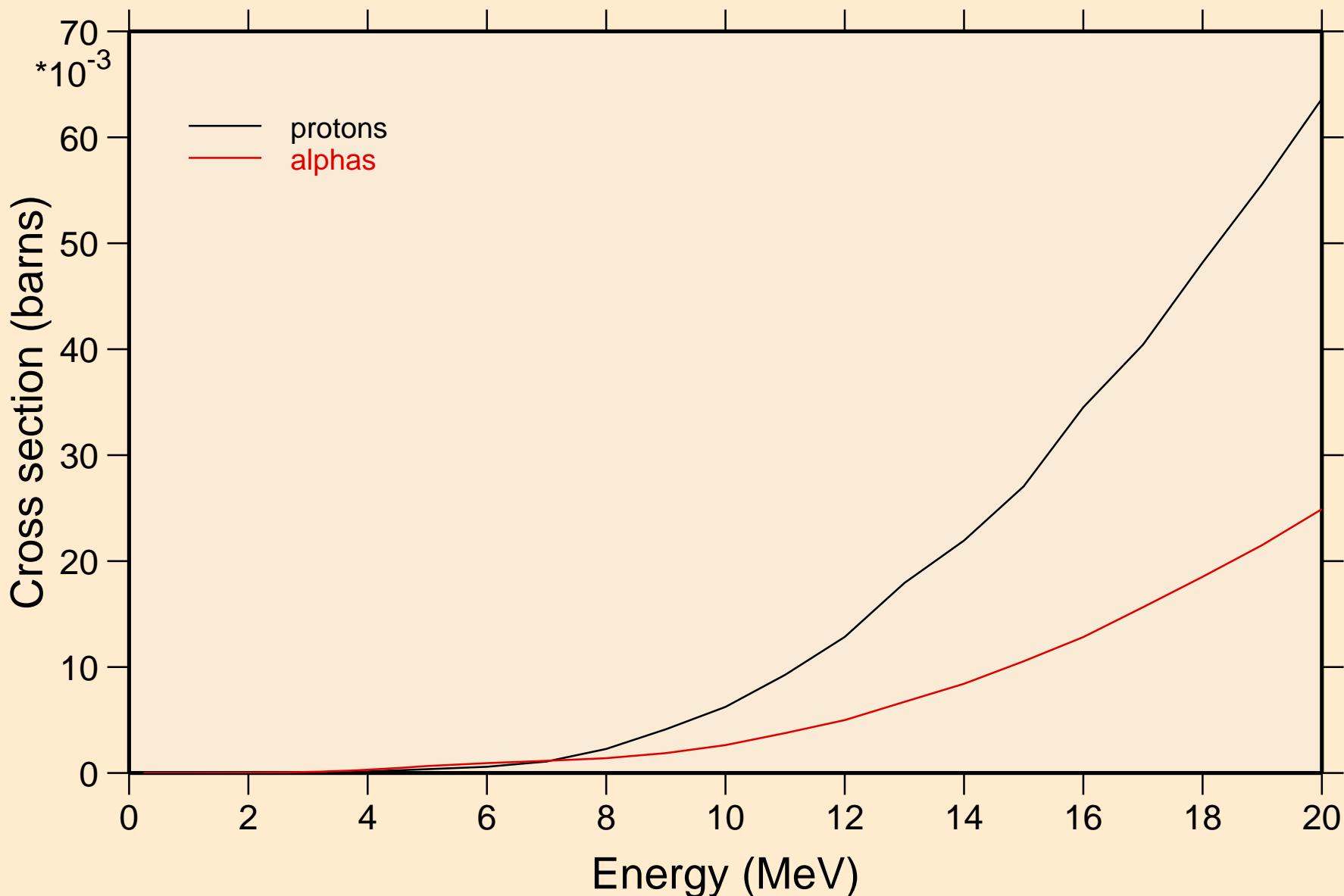
ADVANCE CALCULATIONS

Recoil Heating



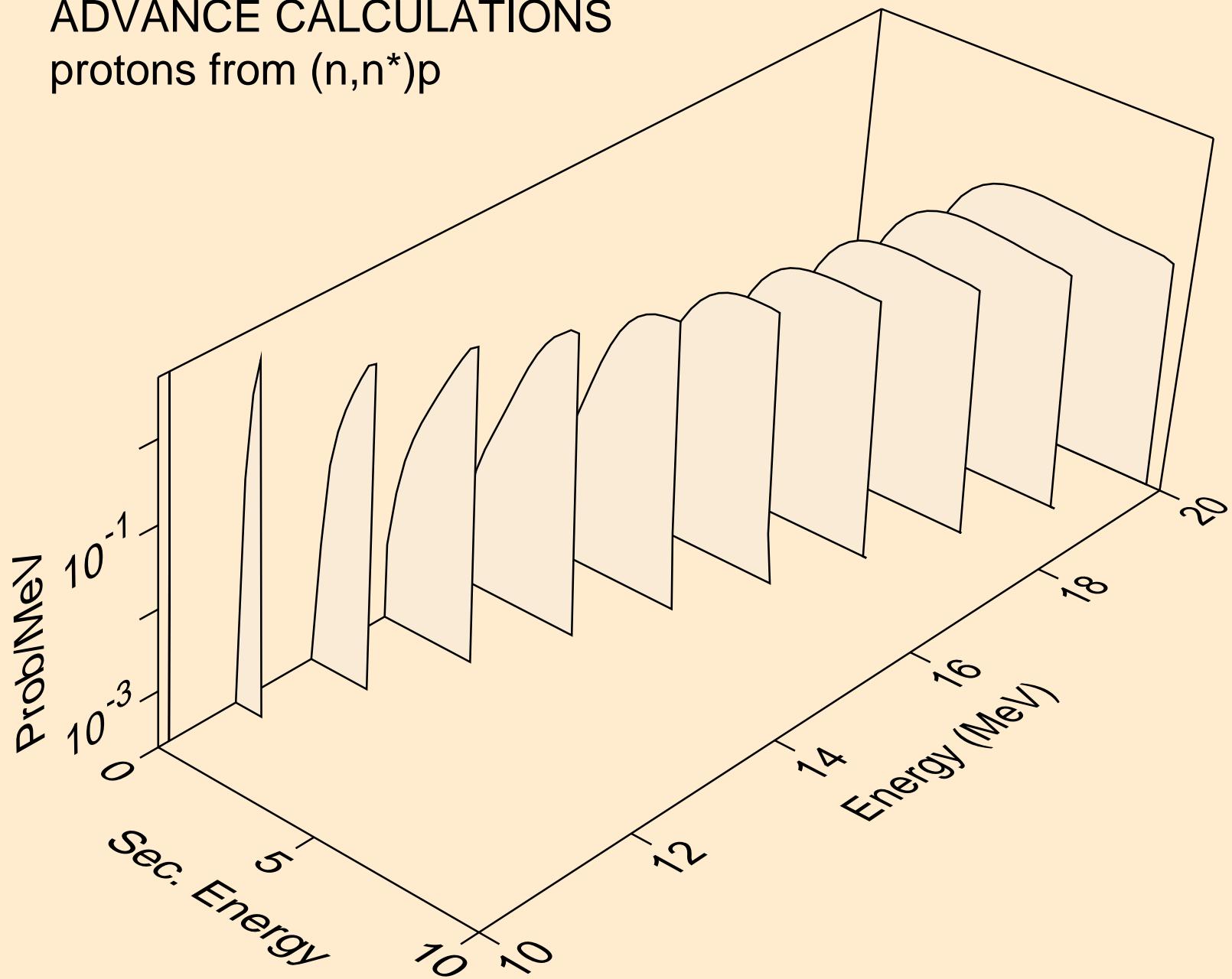
ADVANCE CALCULATIONS

Particle production cross sections



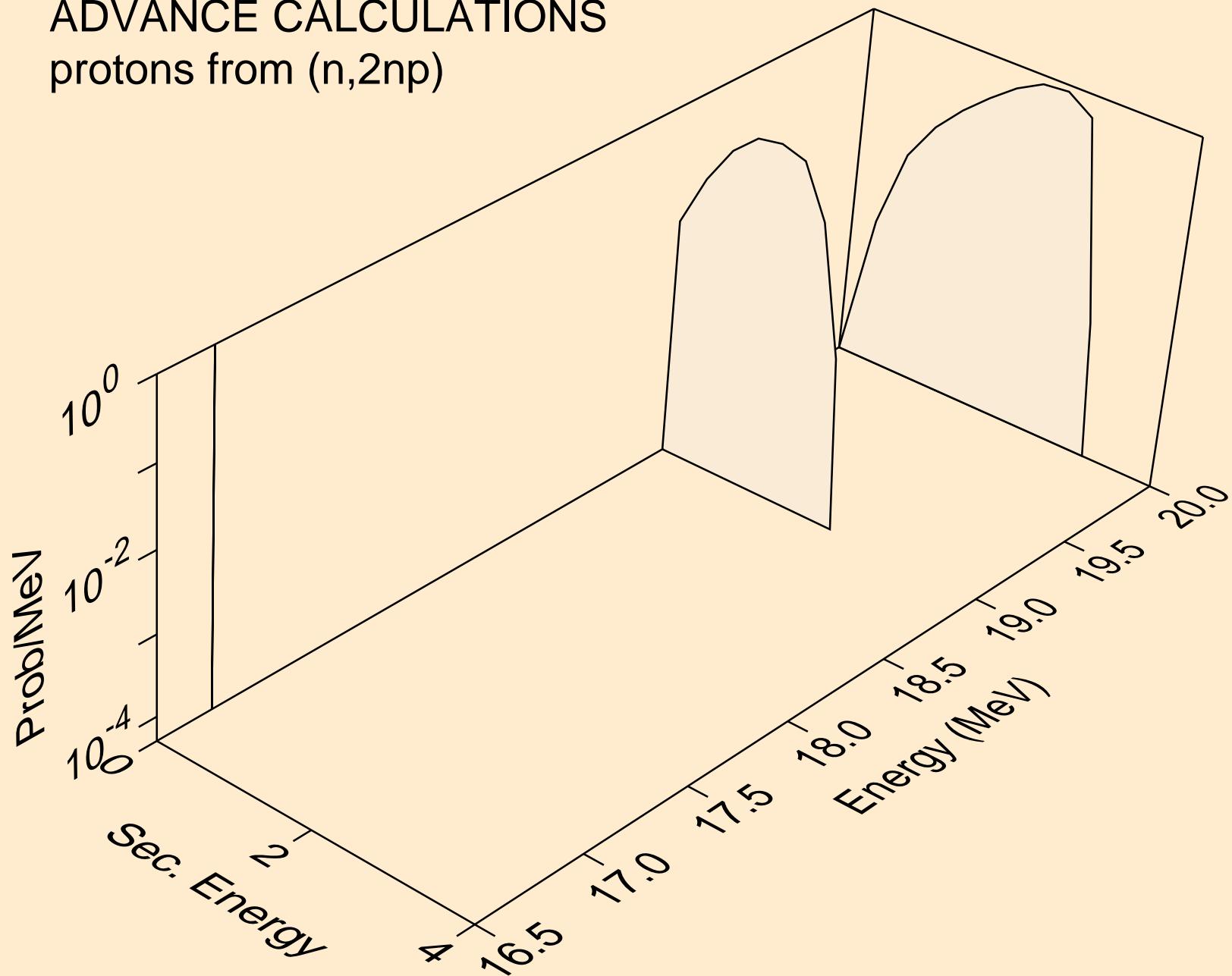
ADVANCE CALCULATIONS

protons from $(n,n^*)p$



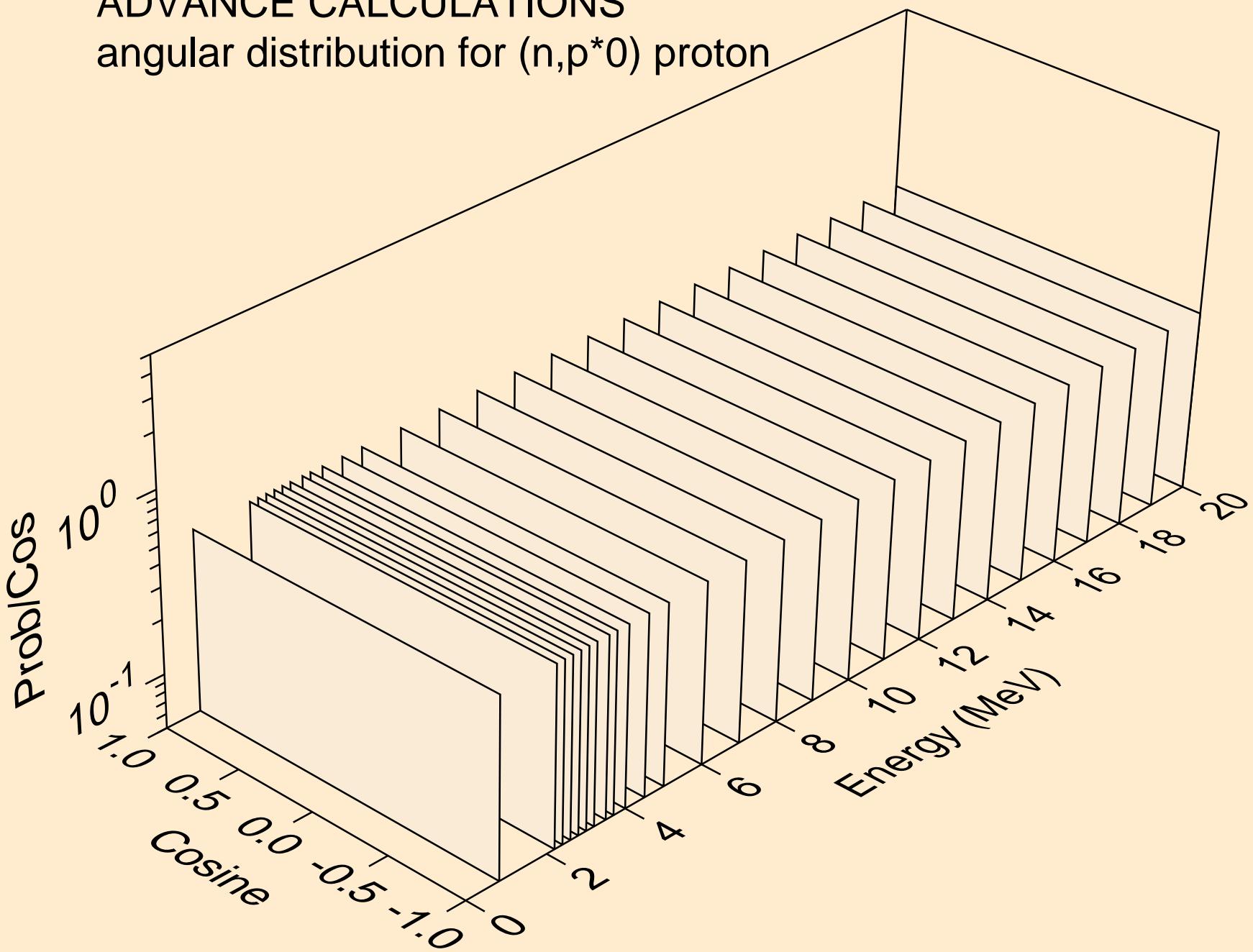
ADVANCE CALCULATIONS

protons from ($n,2np$)



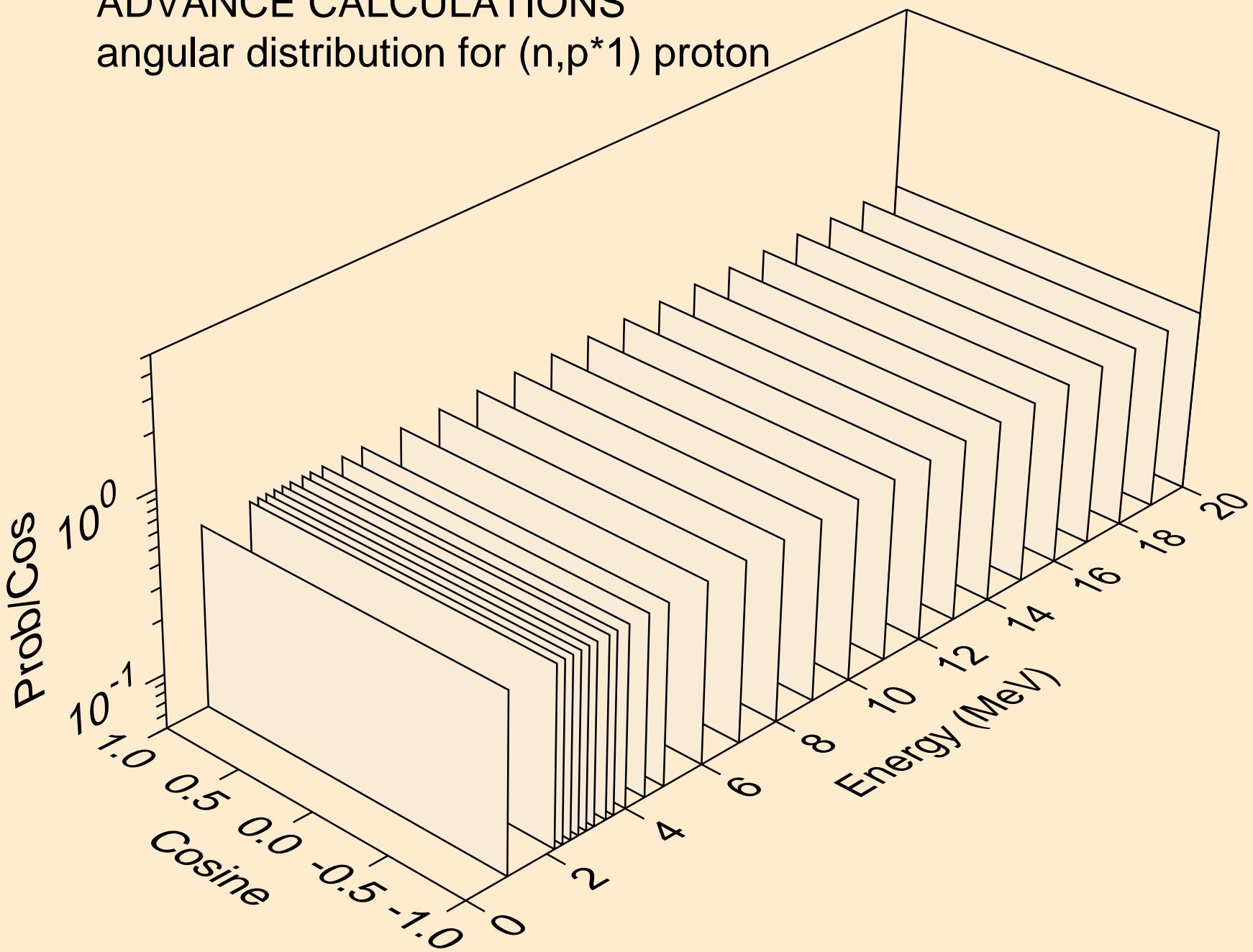
ADVANCE CALCULATIONS

angular distribution for (n,p^*0) proton



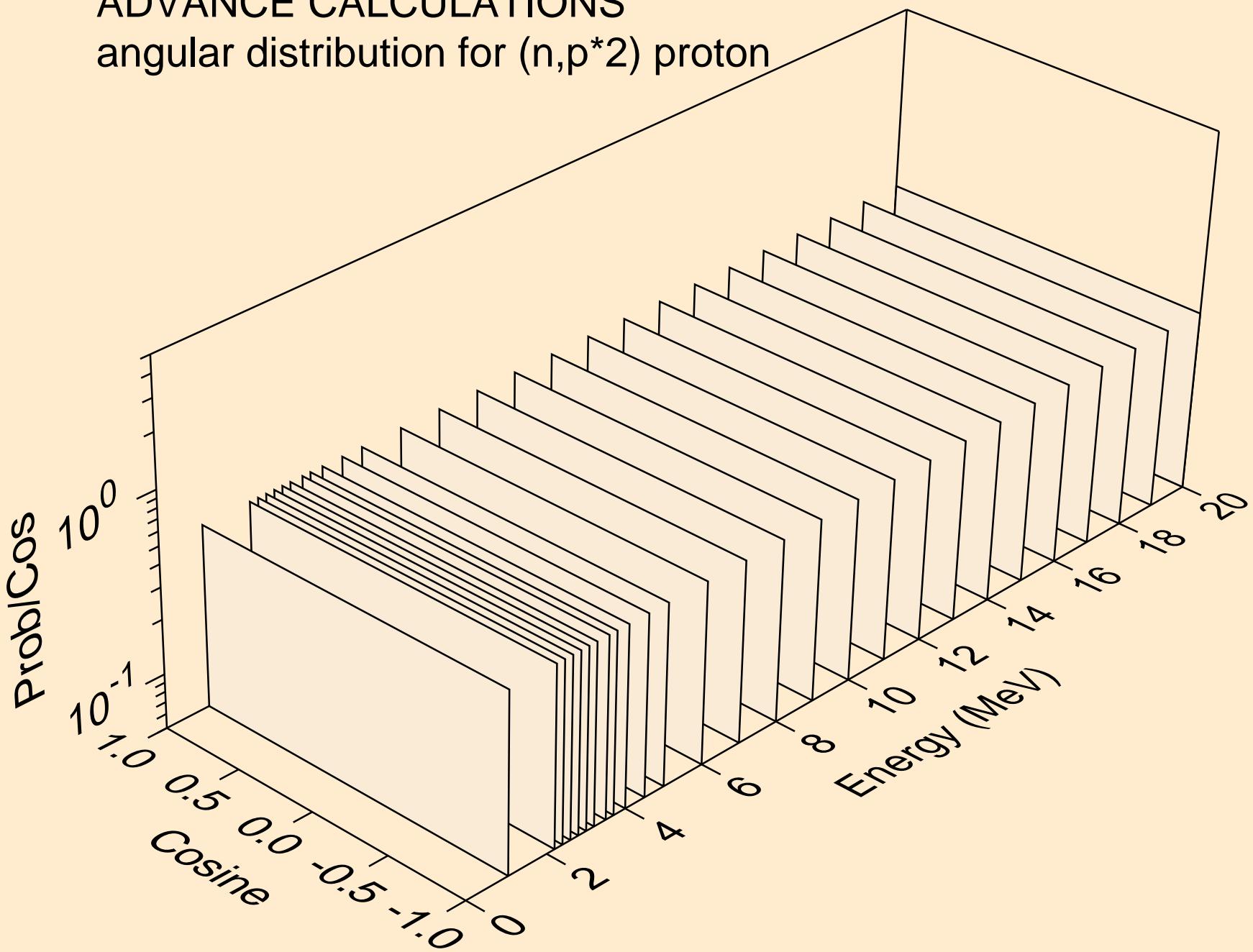
ADVANCE CALCULATIONS

angular distribution for (n,p^*1) proton



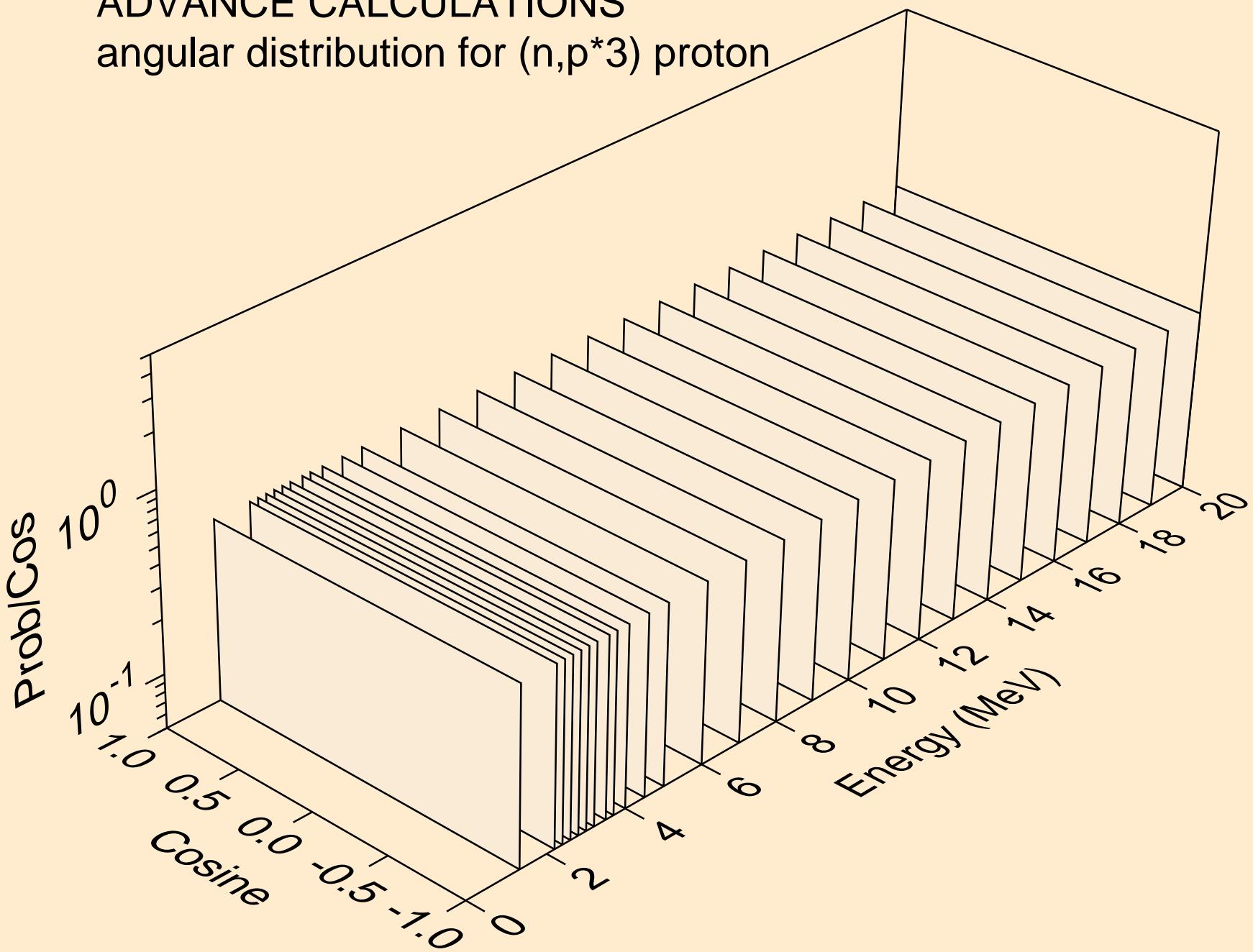
ADVANCE CALCULATIONS

angular distribution for (n,p^*2) proton



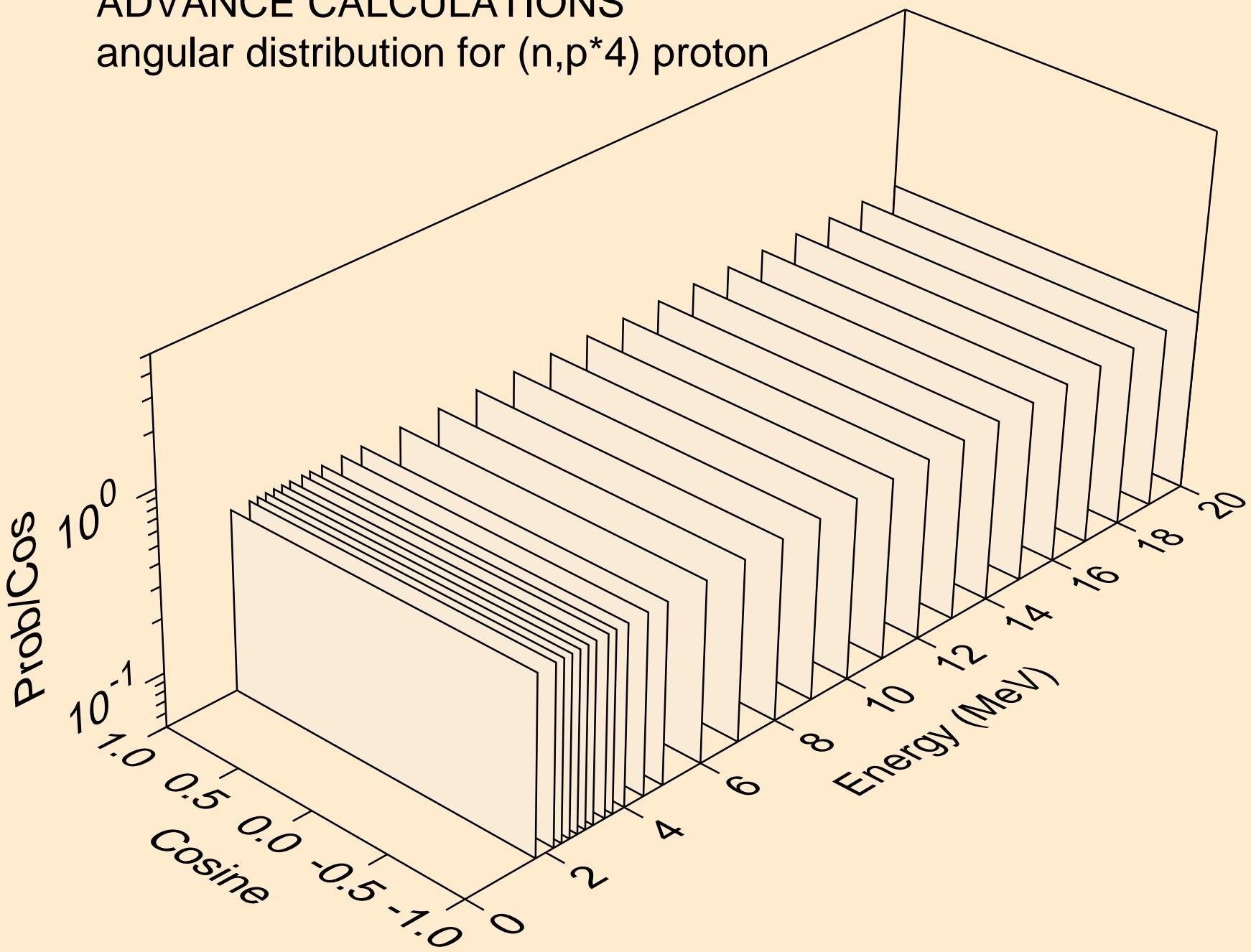
ADVANCE CALCULATIONS

angular distribution for (n,p^*3) proton



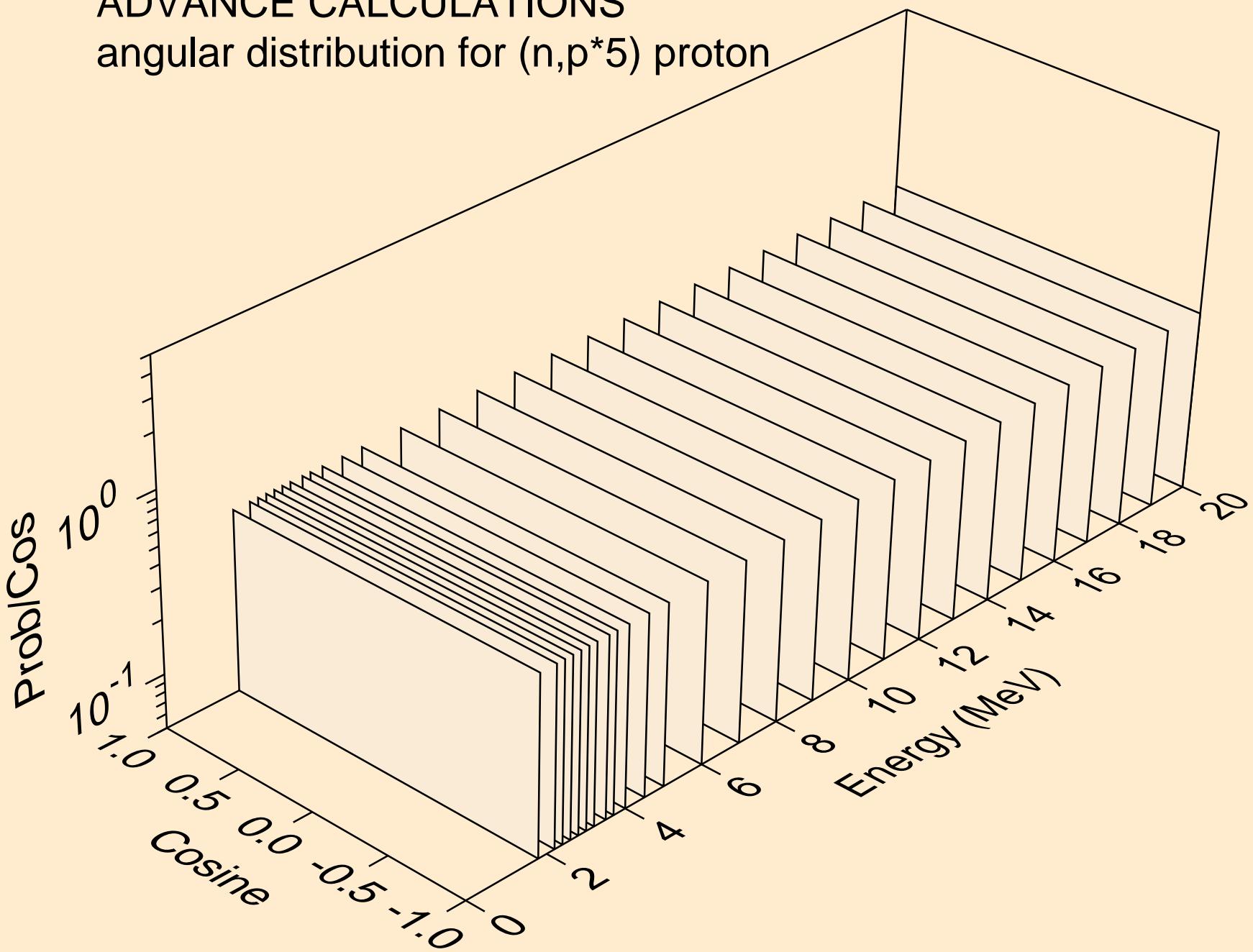
ADVANCE CALCULATIONS

angular distribution for (n,p^*4) proton



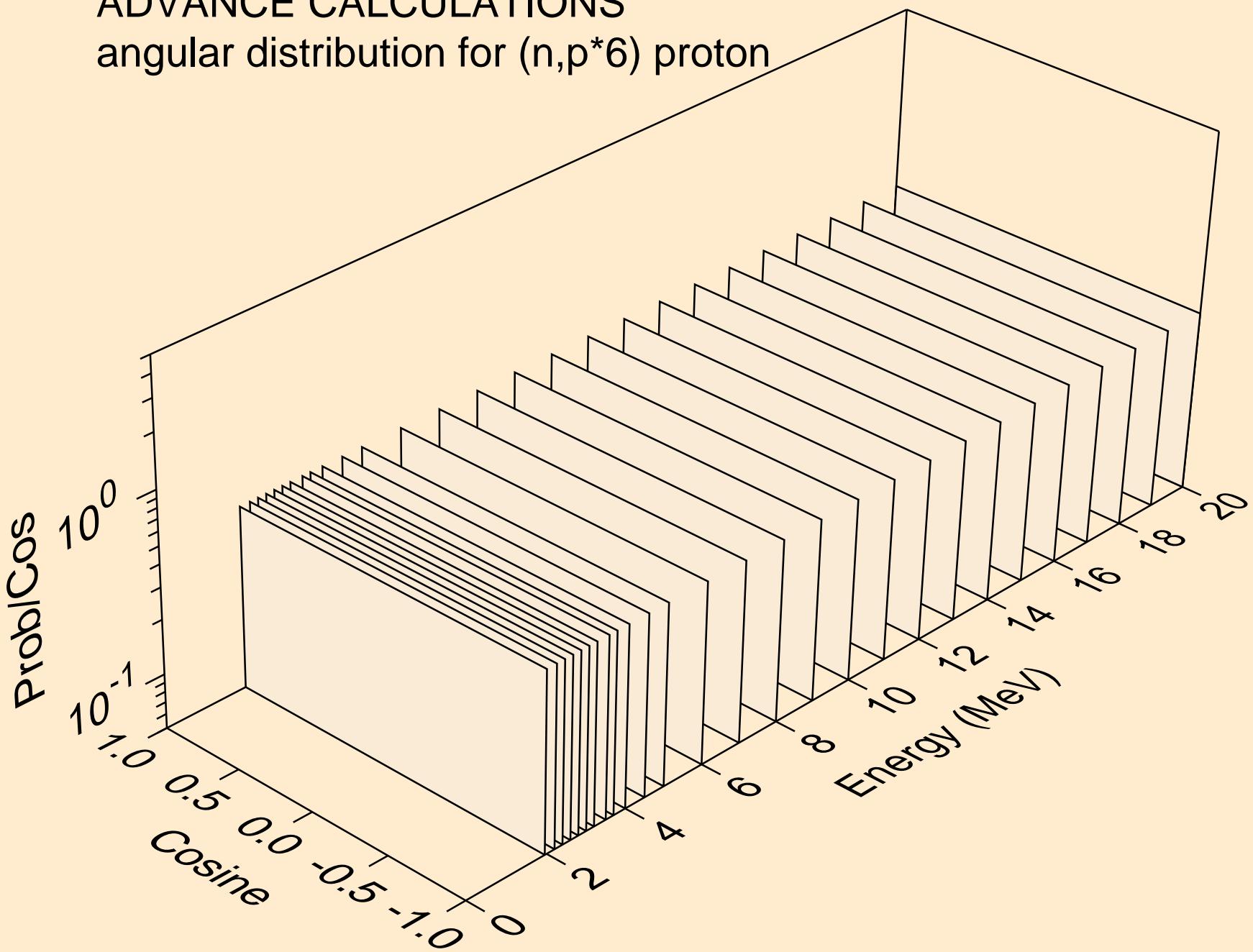
ADVANCE CALCULATIONS

angular distribution for (n,p^*5) proton



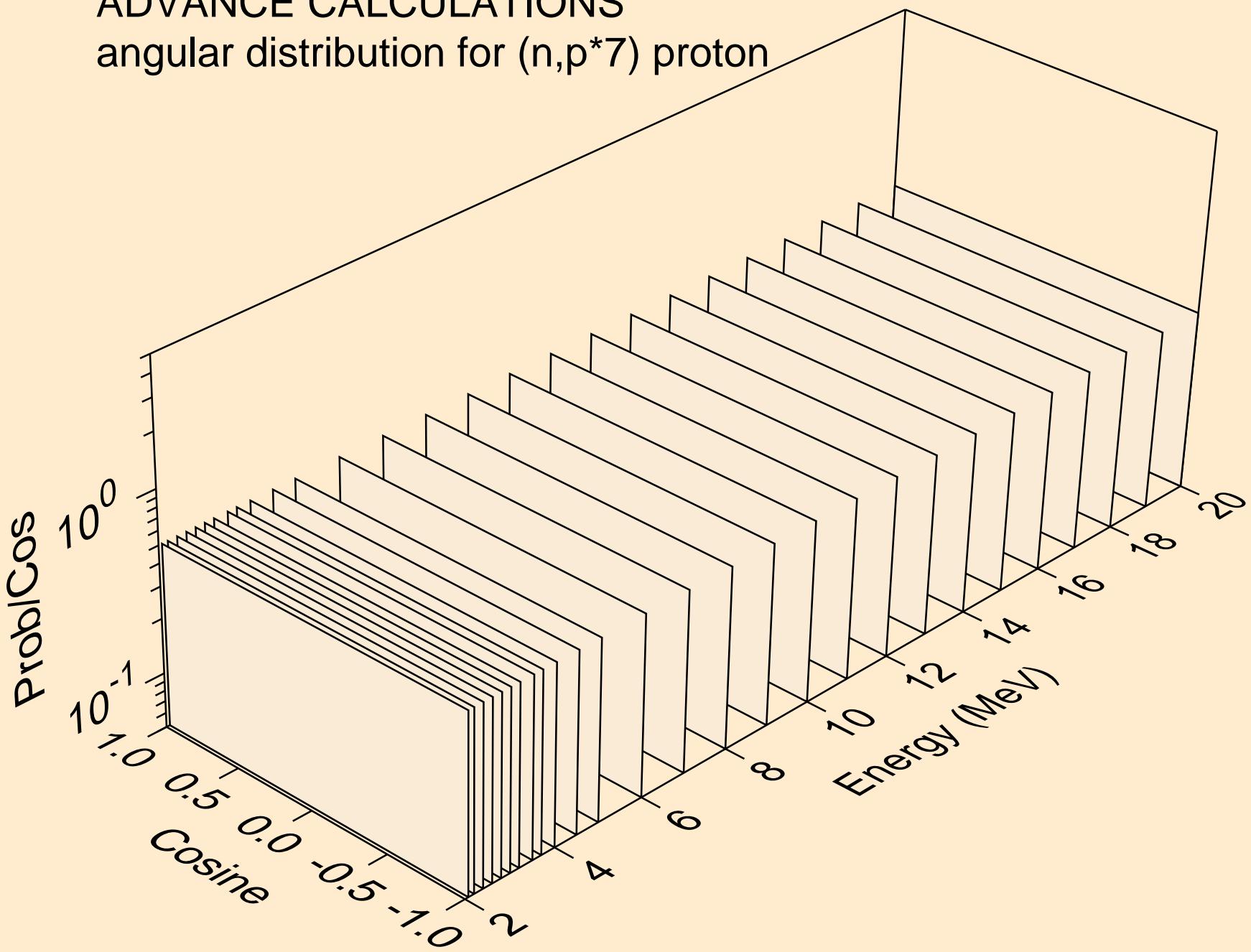
ADVANCE CALCULATIONS

angular distribution for (n,p*6) proton



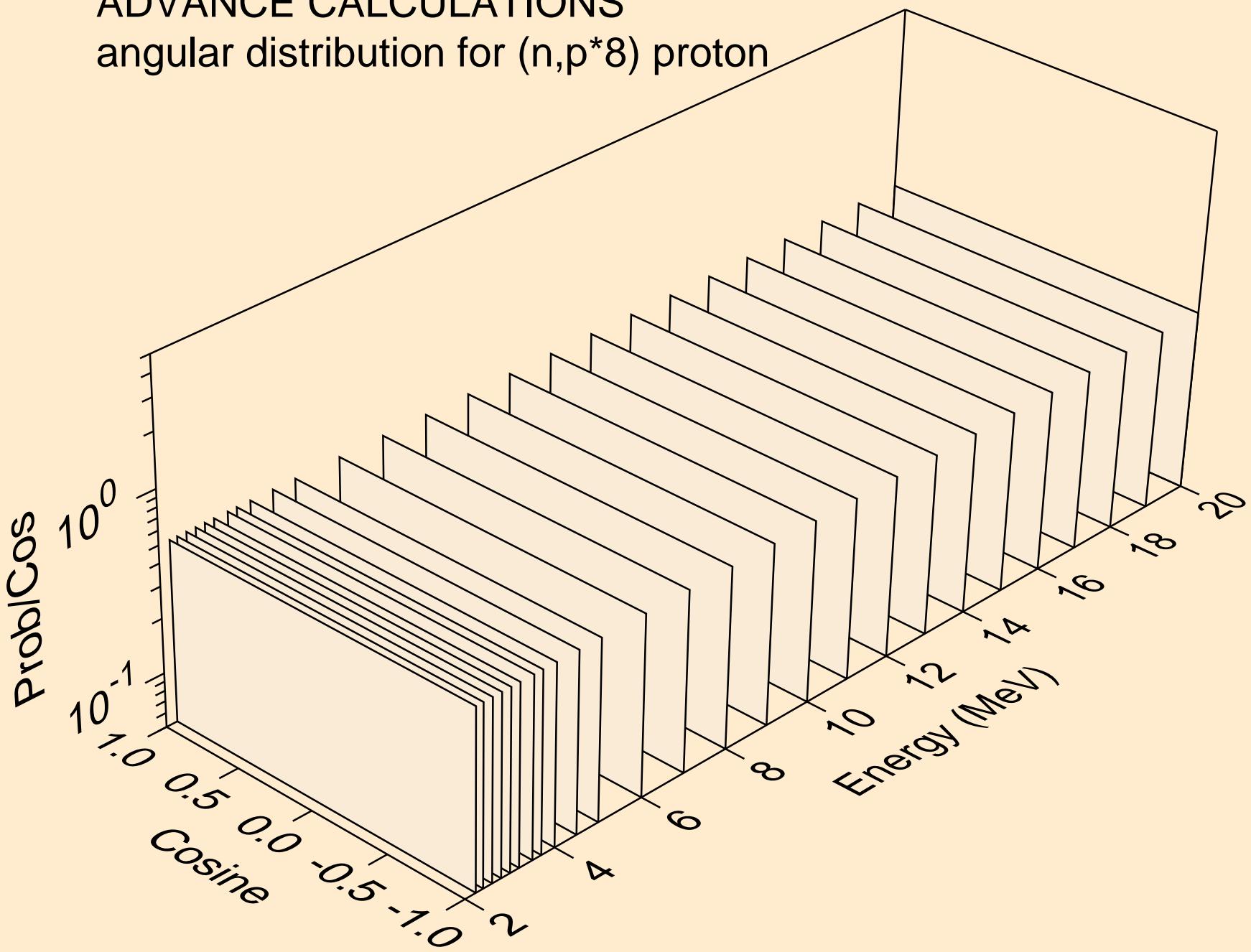
ADVANCE CALCULATIONS

angular distribution for (n,p^*7) proton



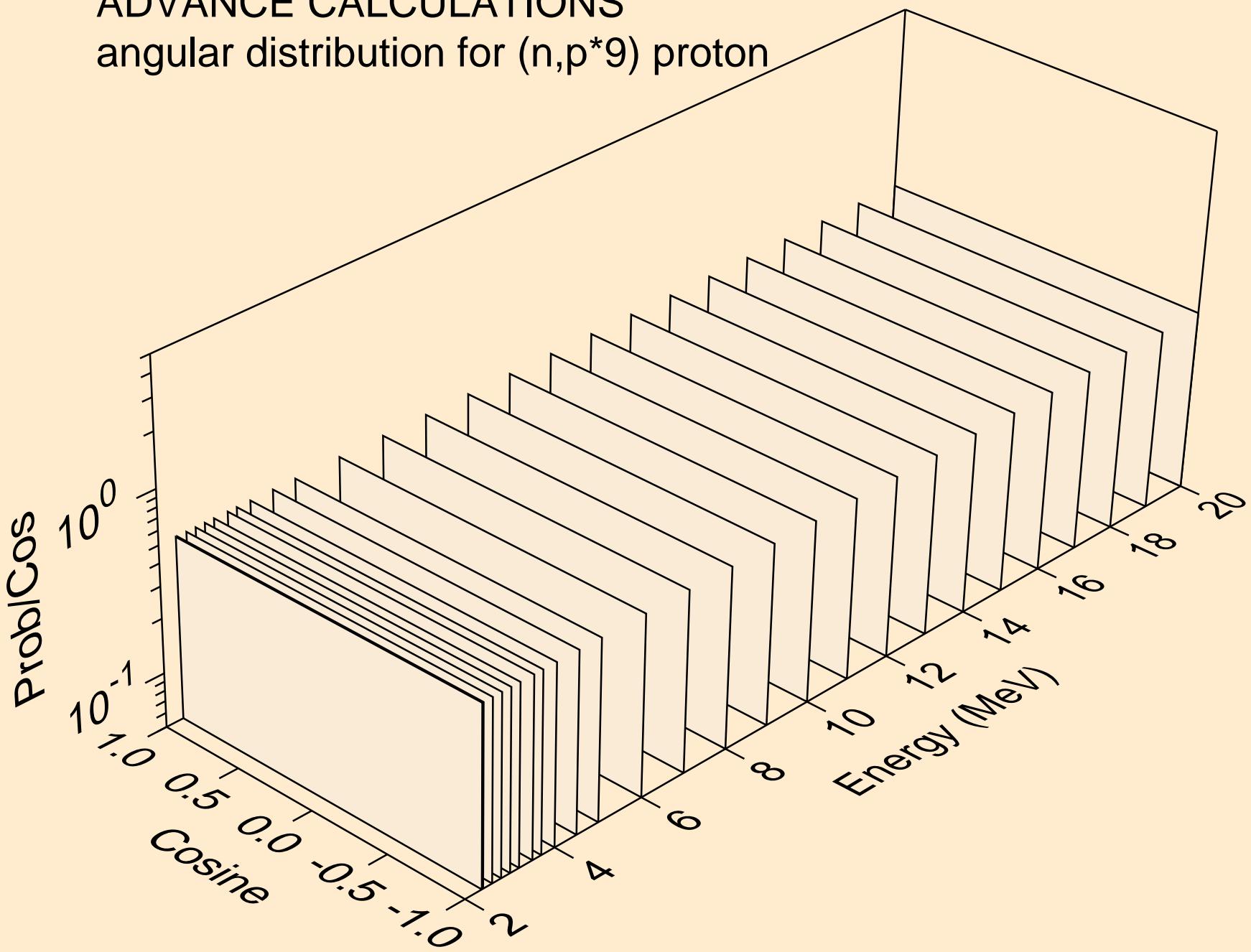
ADVANCE CALCULATIONS

angular distribution for (n,p*8) proton



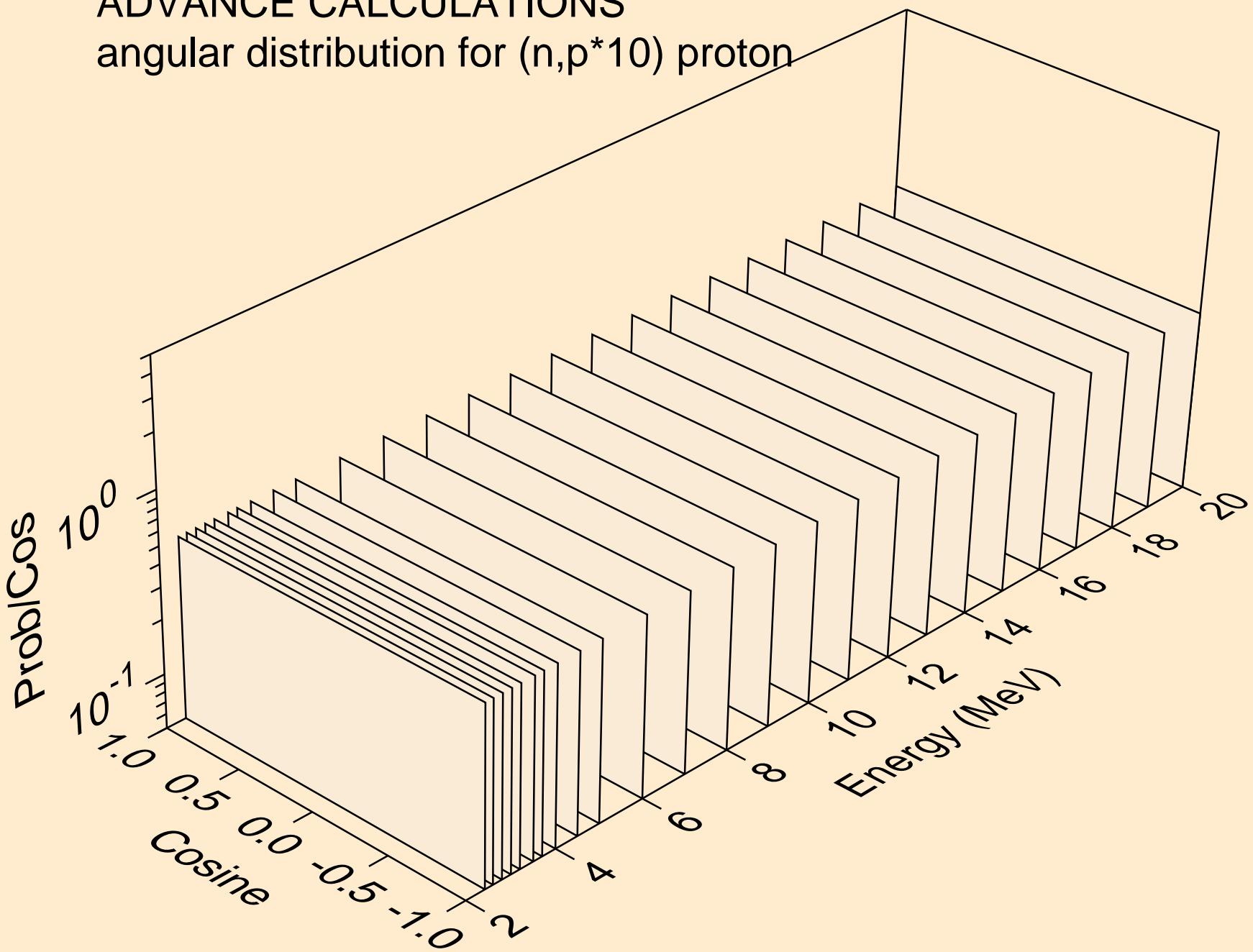
ADVANCE CALCULATIONS

angular distribution for $(n,p^*)9$ proton



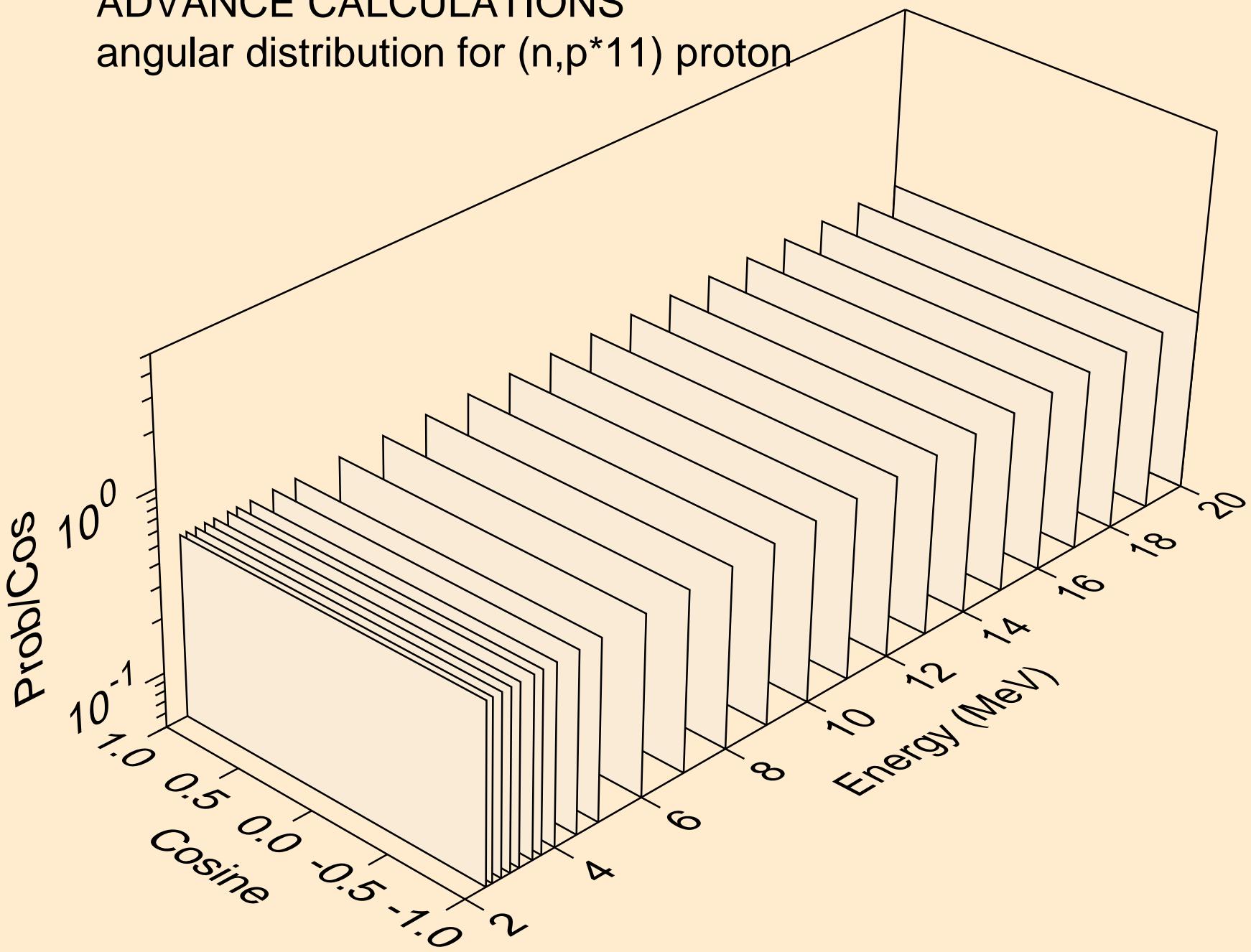
ADVANCE CALCULATIONS

angular distribution for (n,p*10) proton



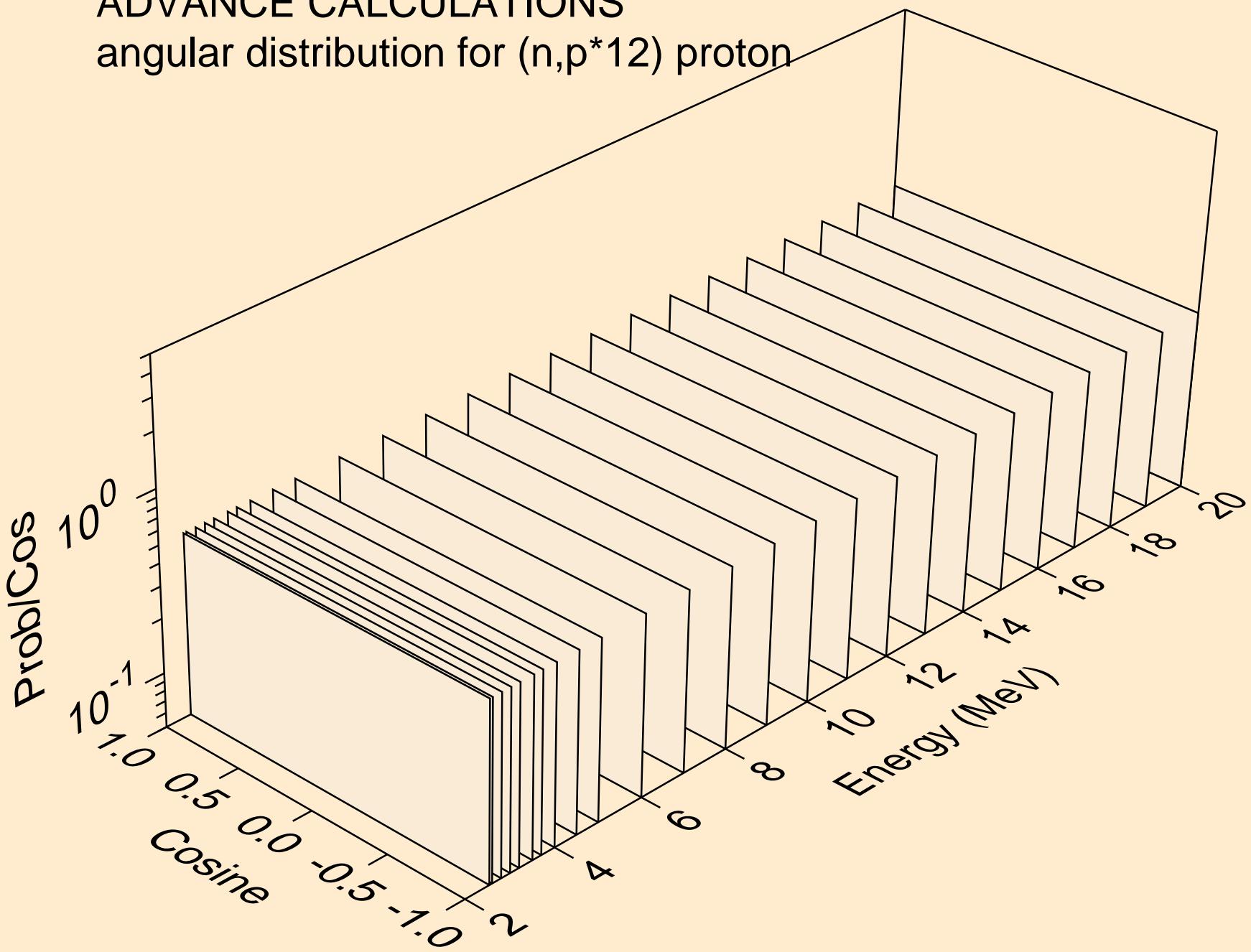
ADVANCE CALCULATIONS

angular distribution for (n,p^*11) proton



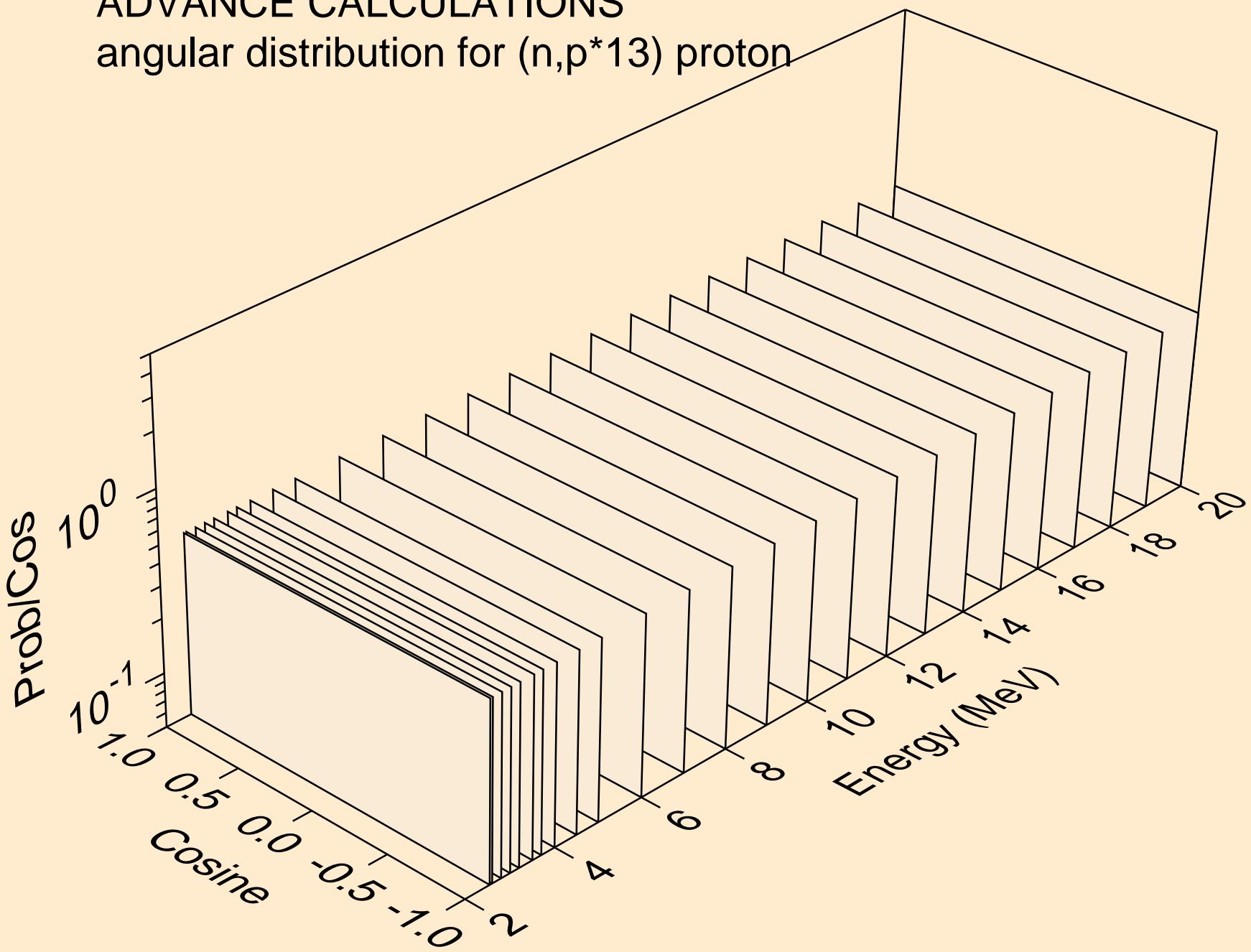
ADVANCE CALCULATIONS

angular distribution for (n,p^*12) proton



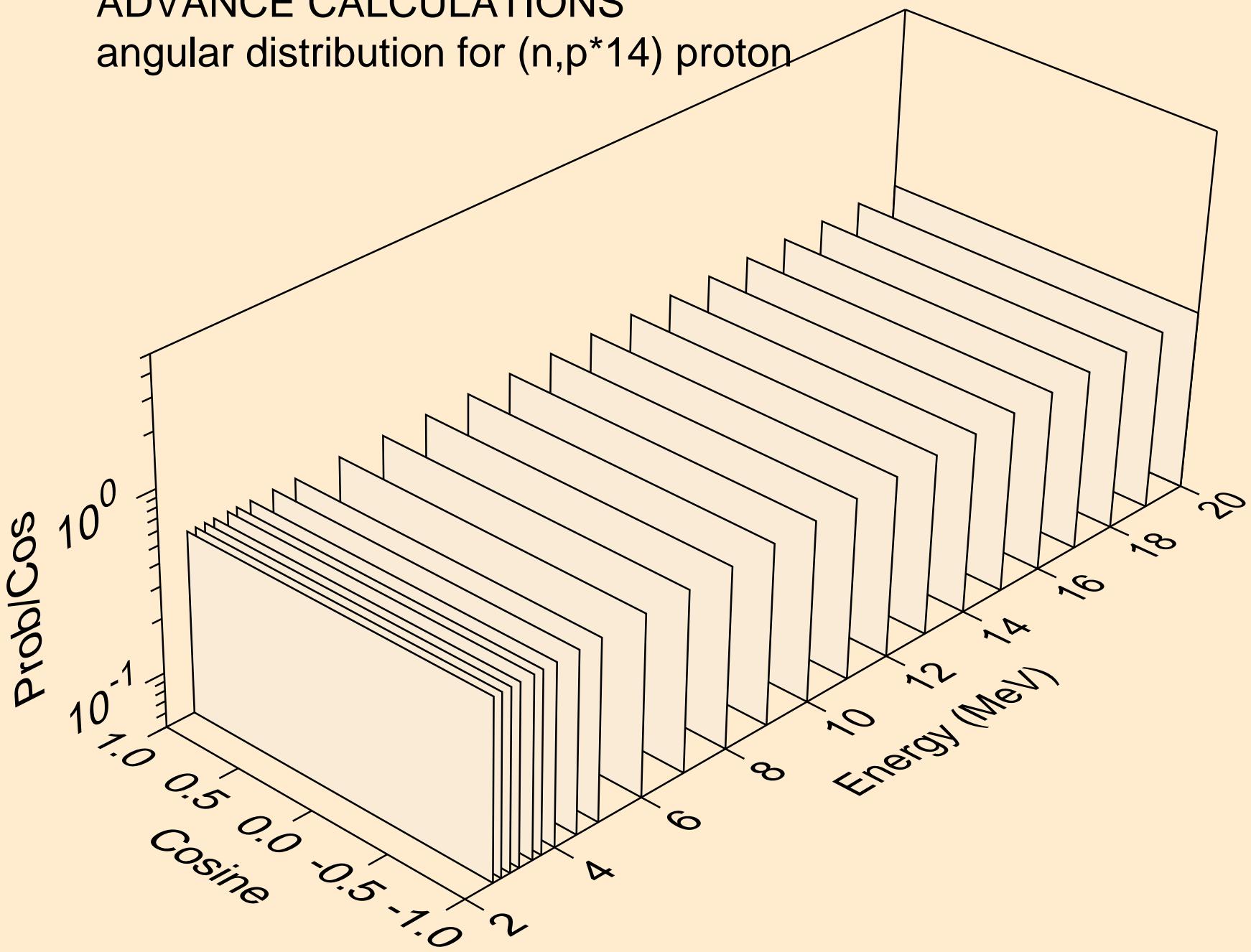
ADVANCE CALCULATIONS

angular distribution for (n,p^*13) proton



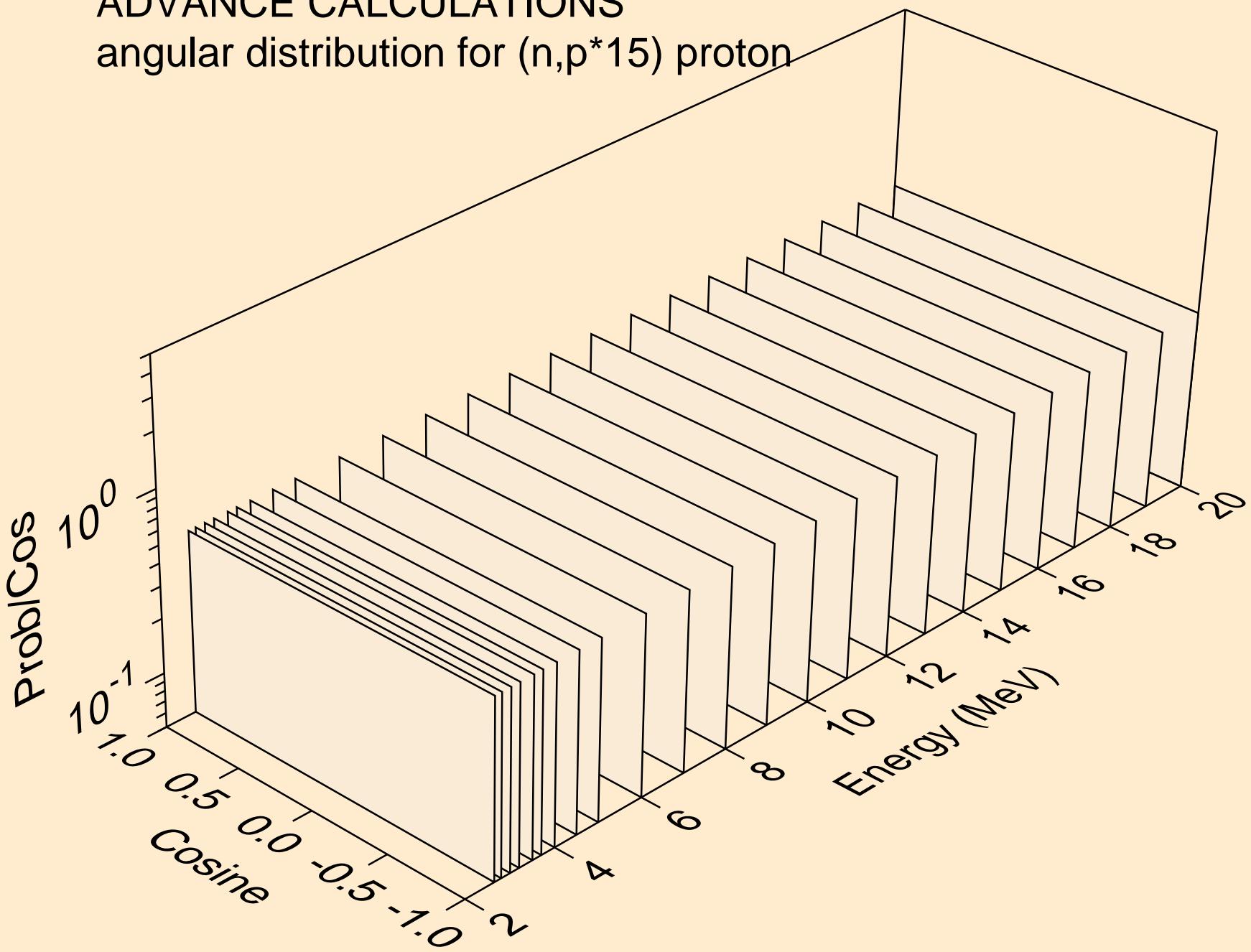
ADVANCE CALCULATIONS

angular distribution for (n,p^*14) proton



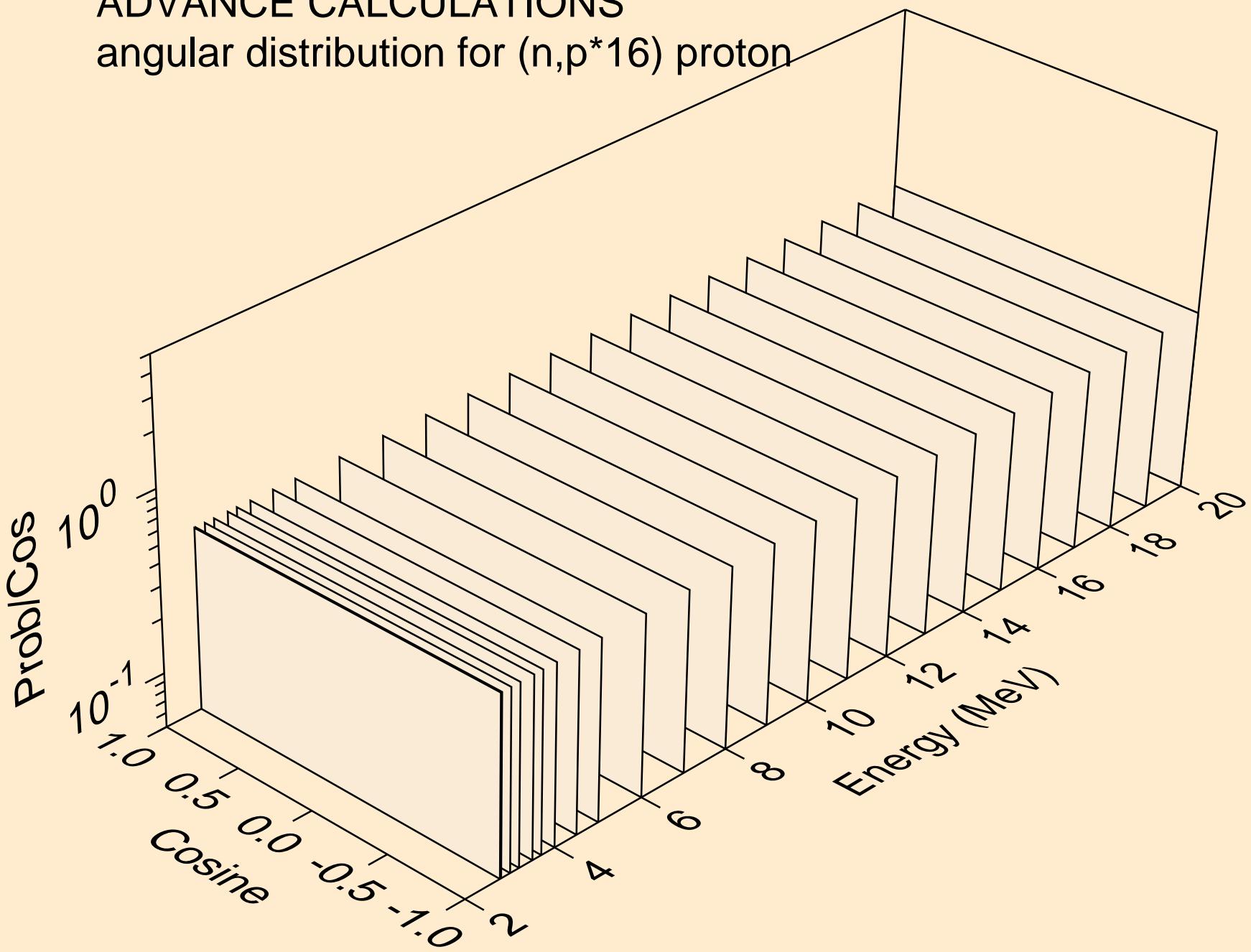
ADVANCE CALCULATIONS

angular distribution for (n,p^*15) proton



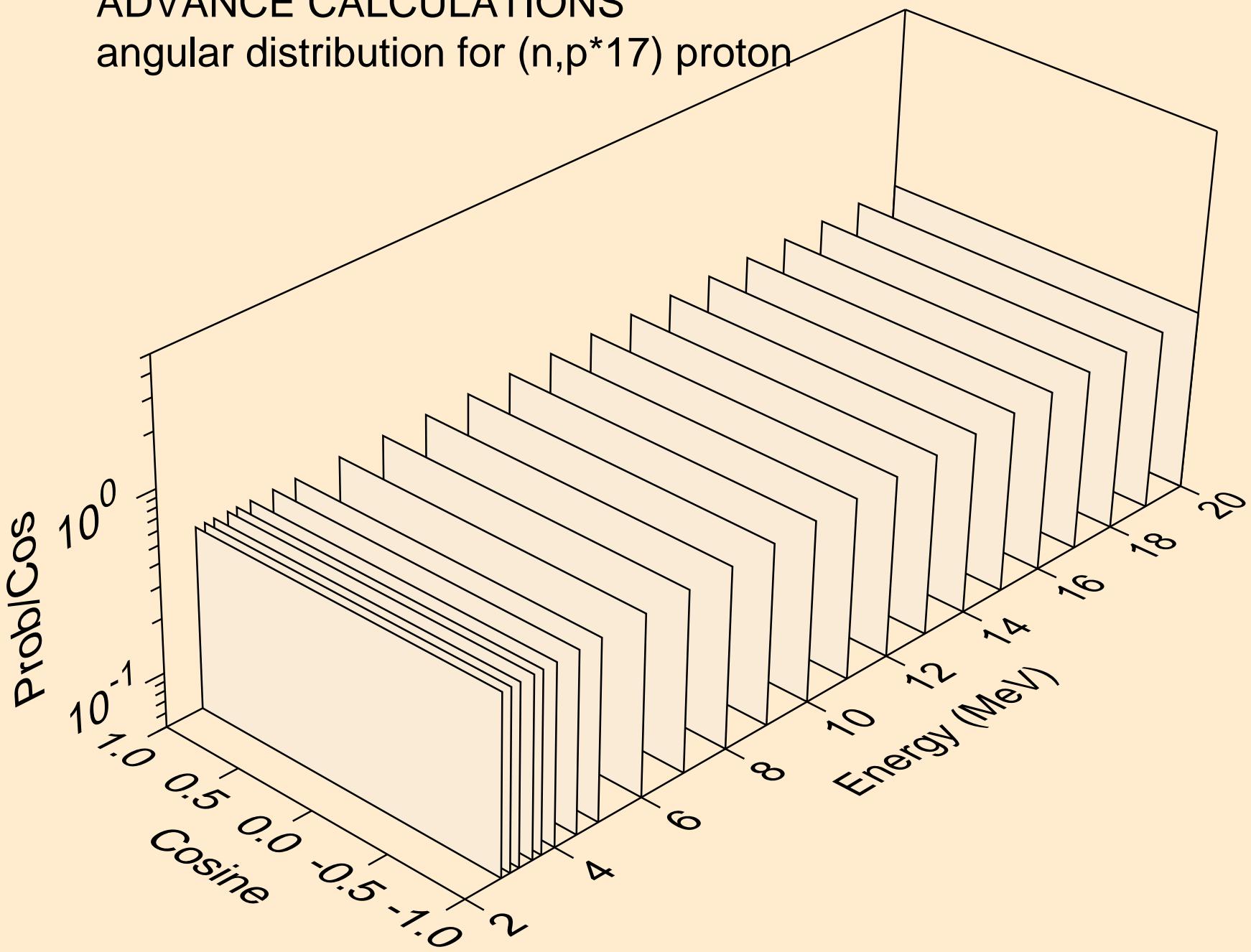
ADVANCE CALCULATIONS

angular distribution for (n,p^*16) proton



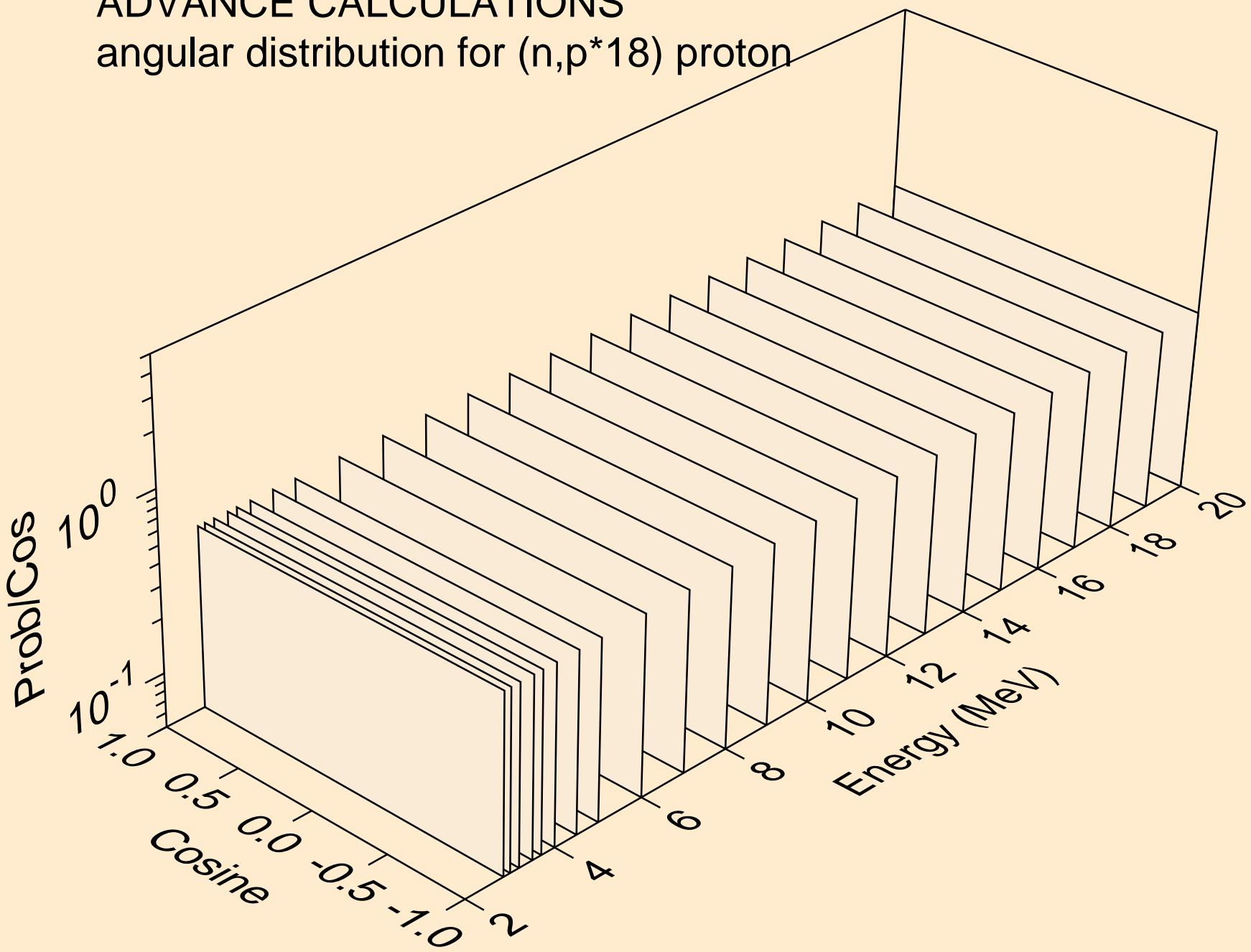
ADVANCE CALCULATIONS

angular distribution for (n,p^*17) proton



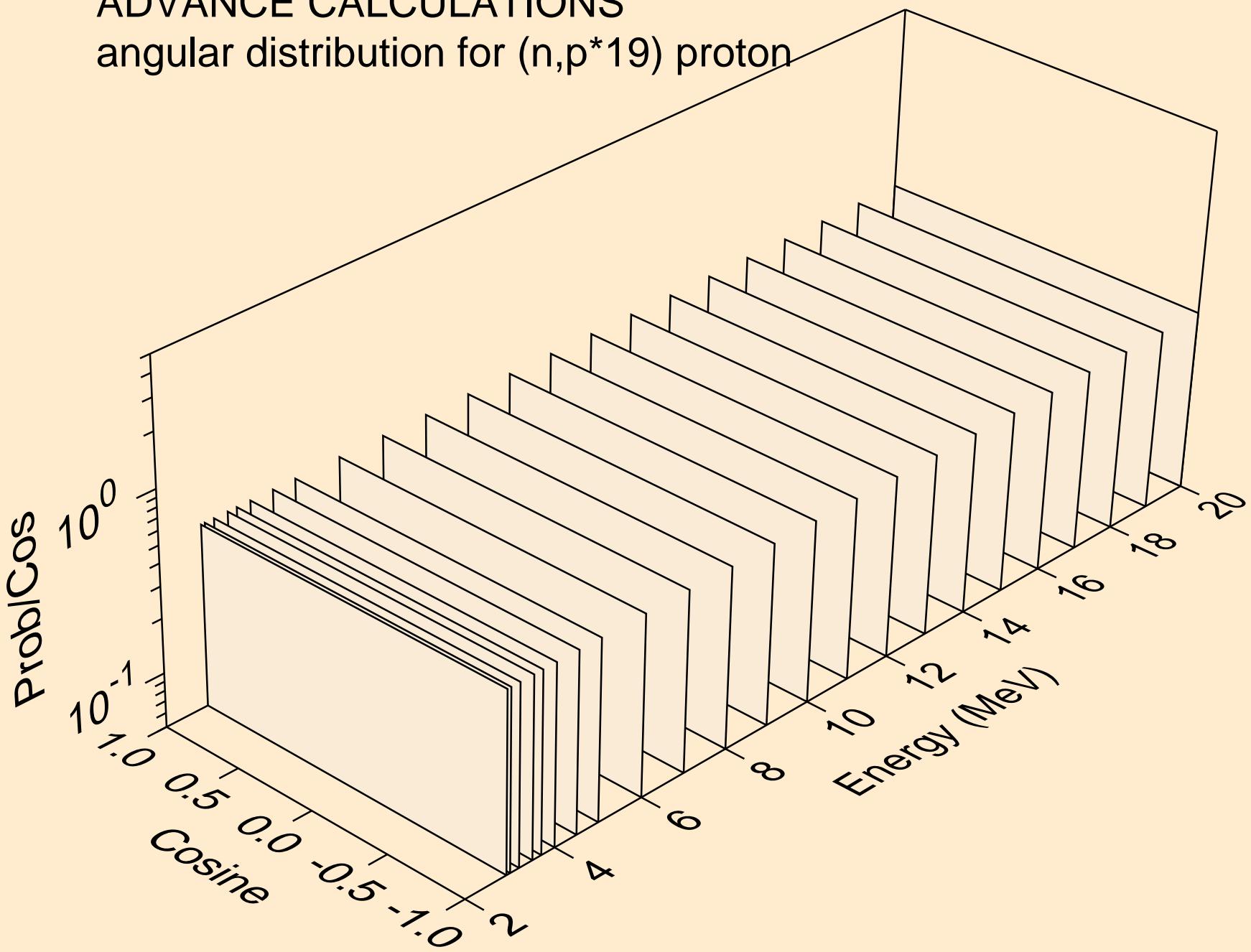
ADVANCE CALCULATIONS

angular distribution for (n,p*18) proton



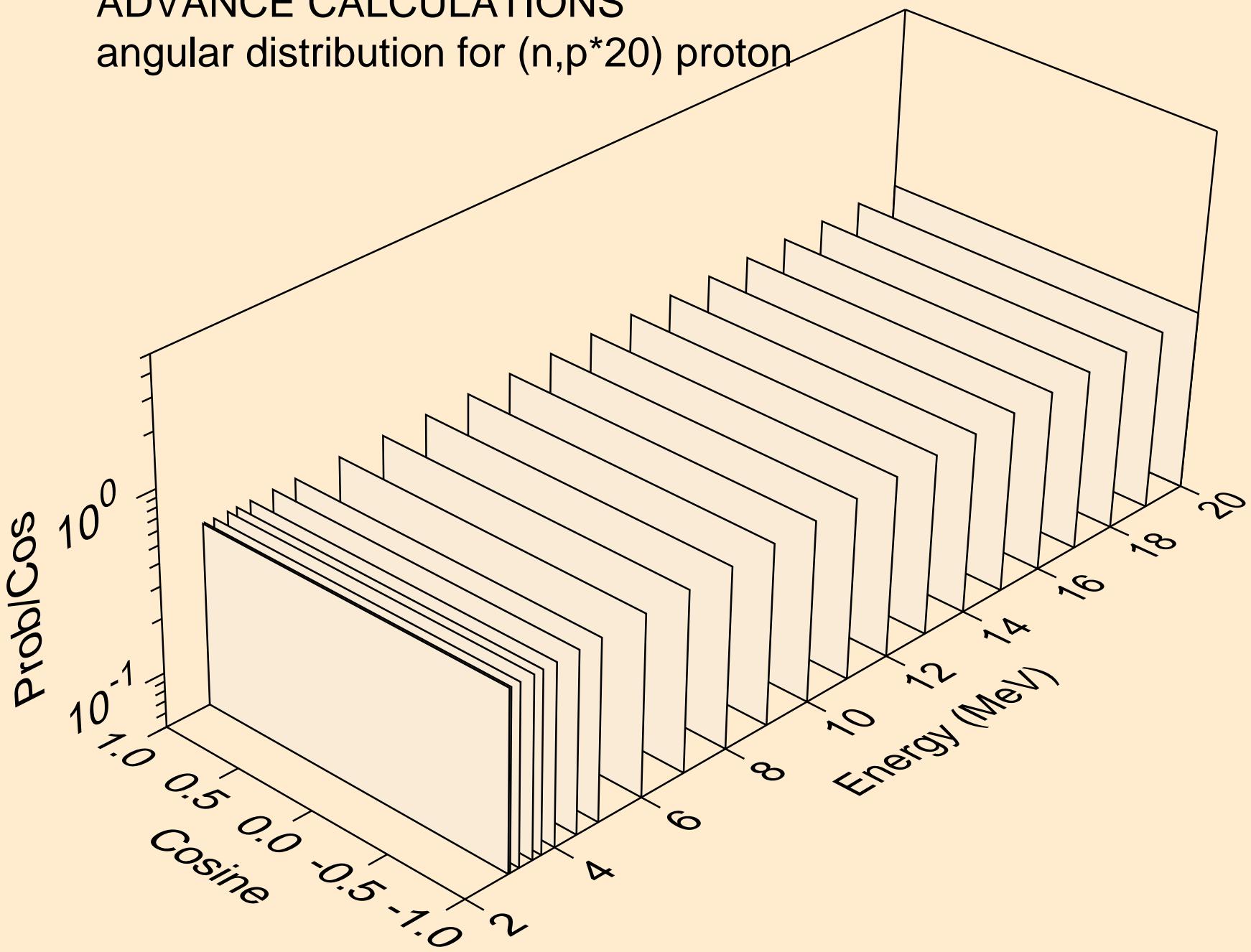
ADVANCE CALCULATIONS

angular distribution for (n,p^*19) proton



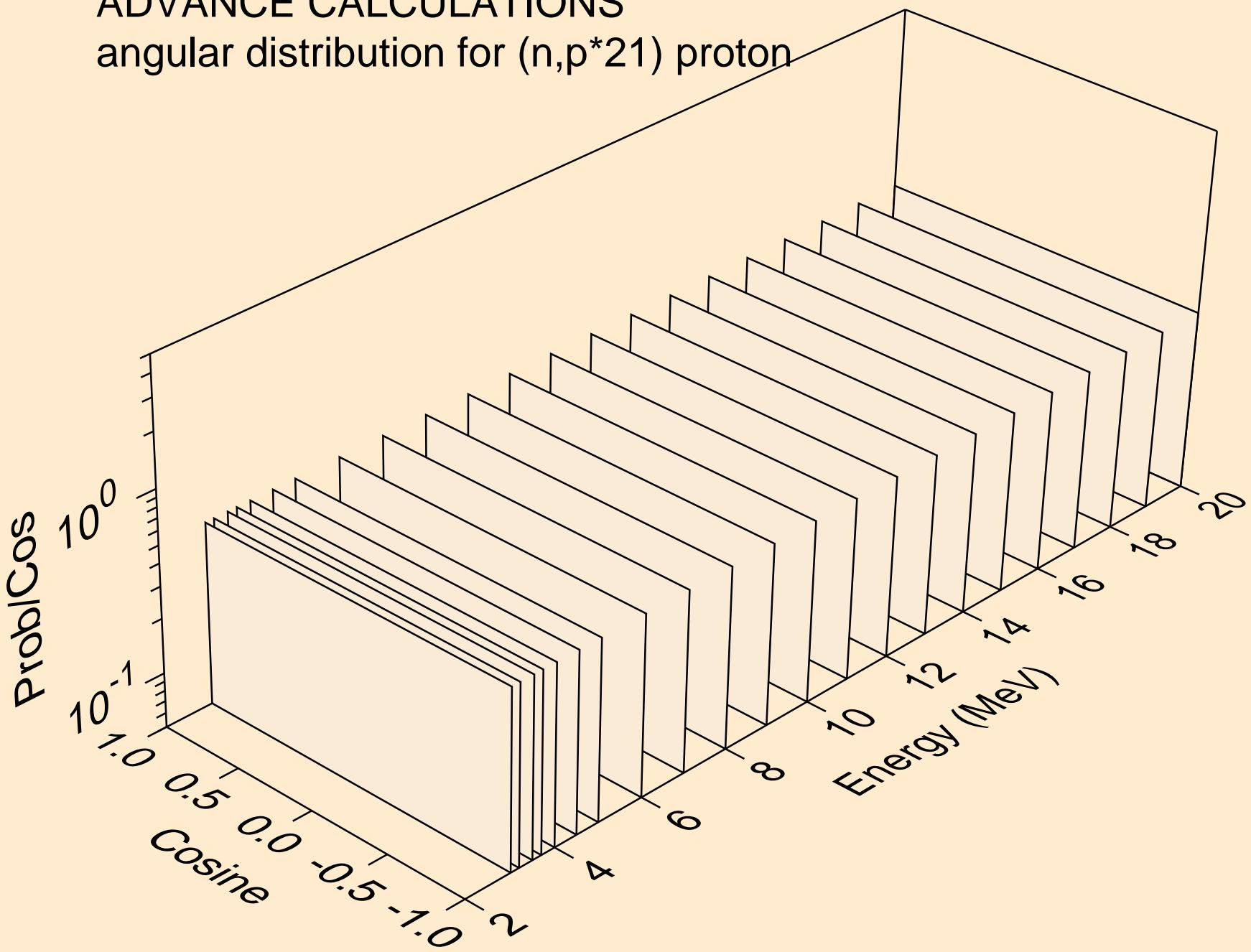
ADVANCE CALCULATIONS

angular distribution for (n,p^*) proton



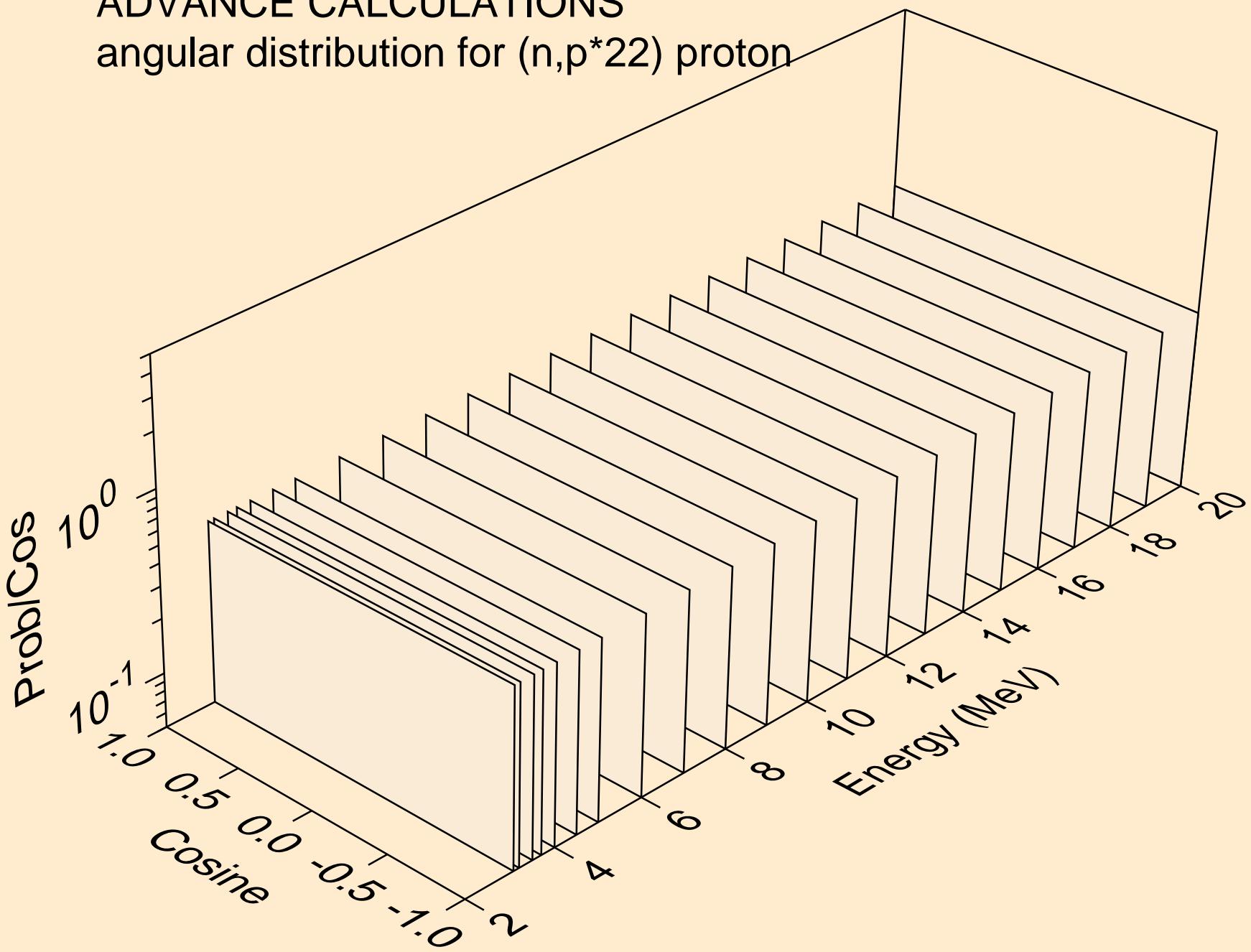
ADVANCE CALCULATIONS

angular distribution for (n,p^*21) proton



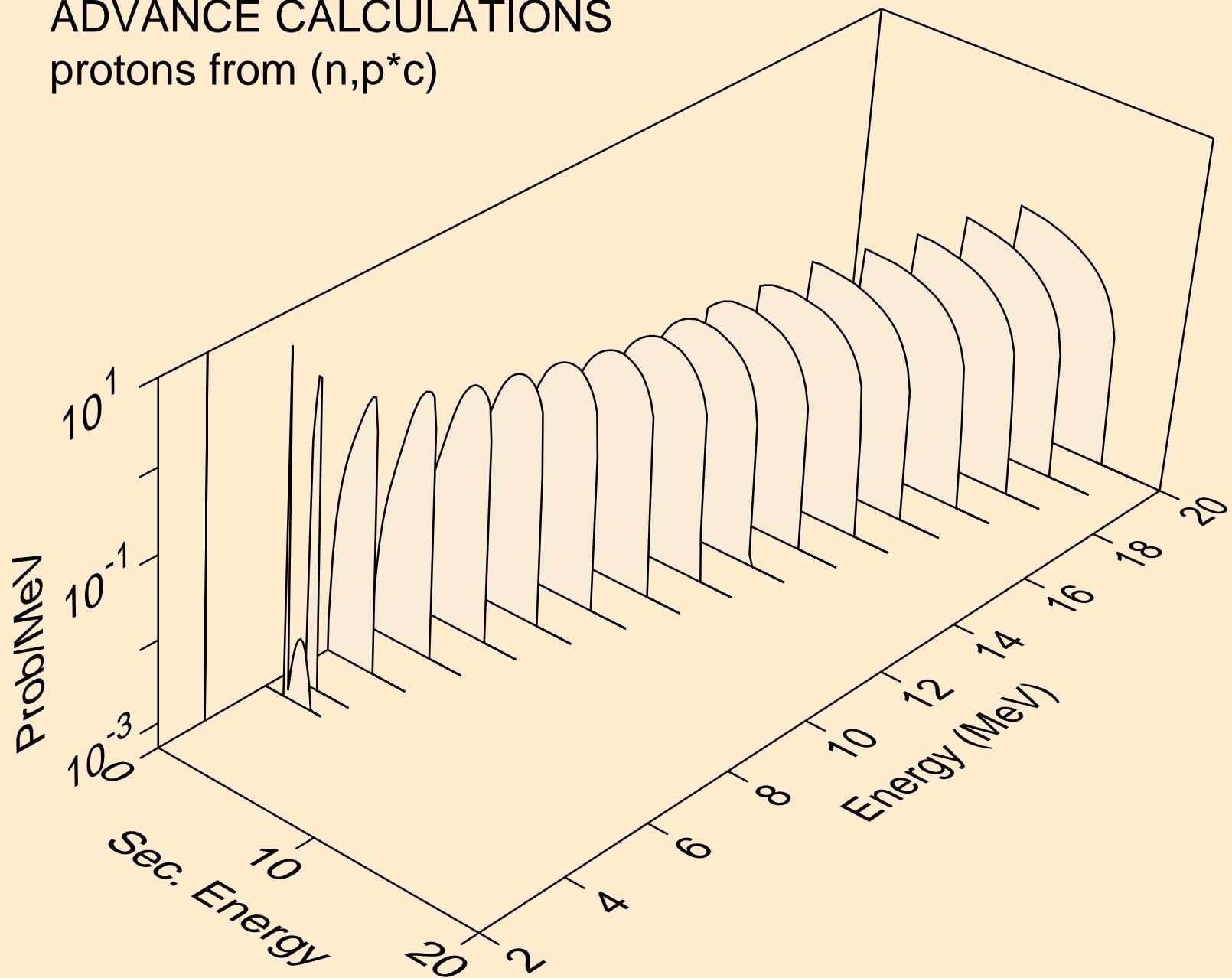
ADVANCE CALCULATIONS

angular distribution for (n,p^*22) proton



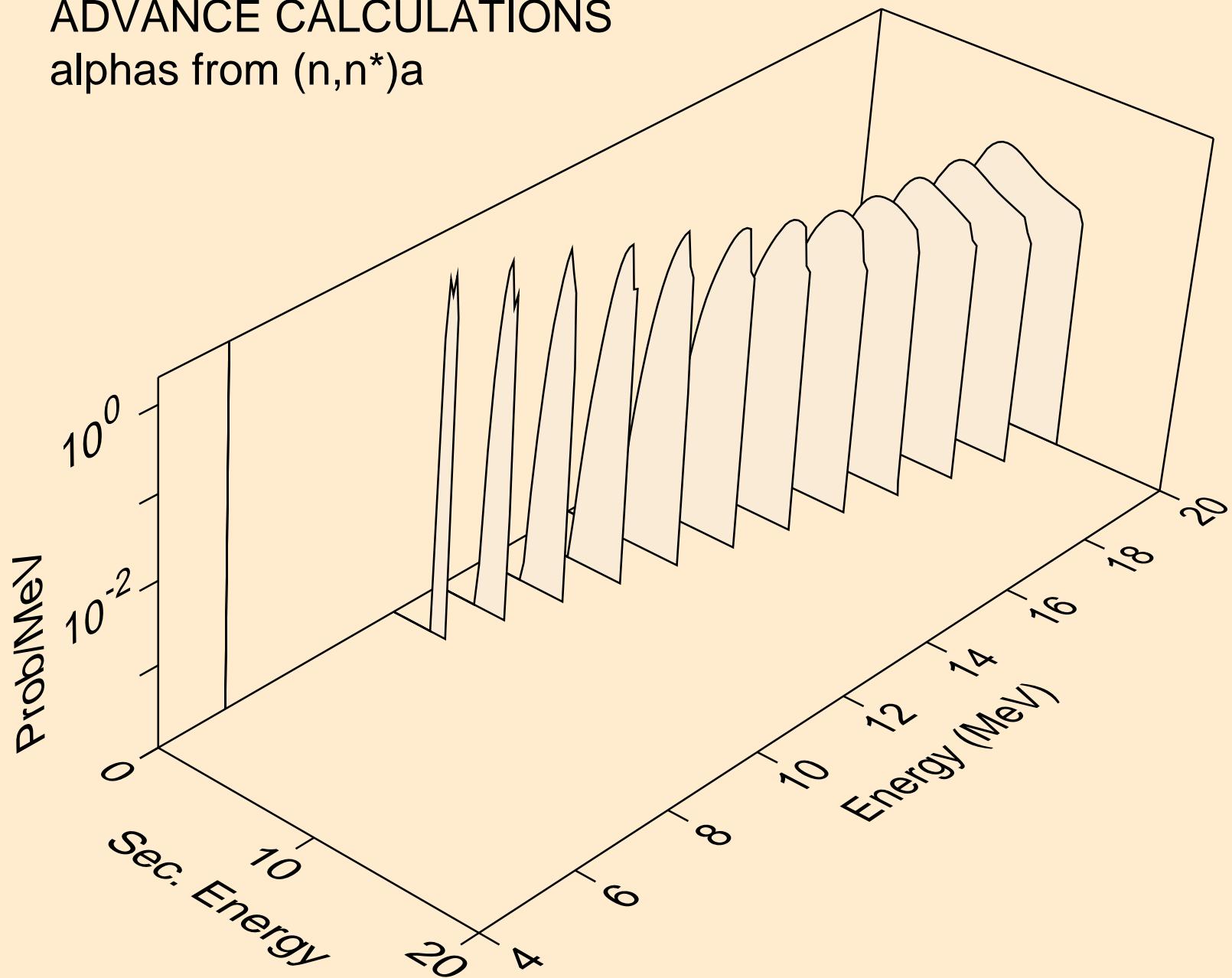
ADVANCE CALCULATIONS

protons from (n, p^*c)



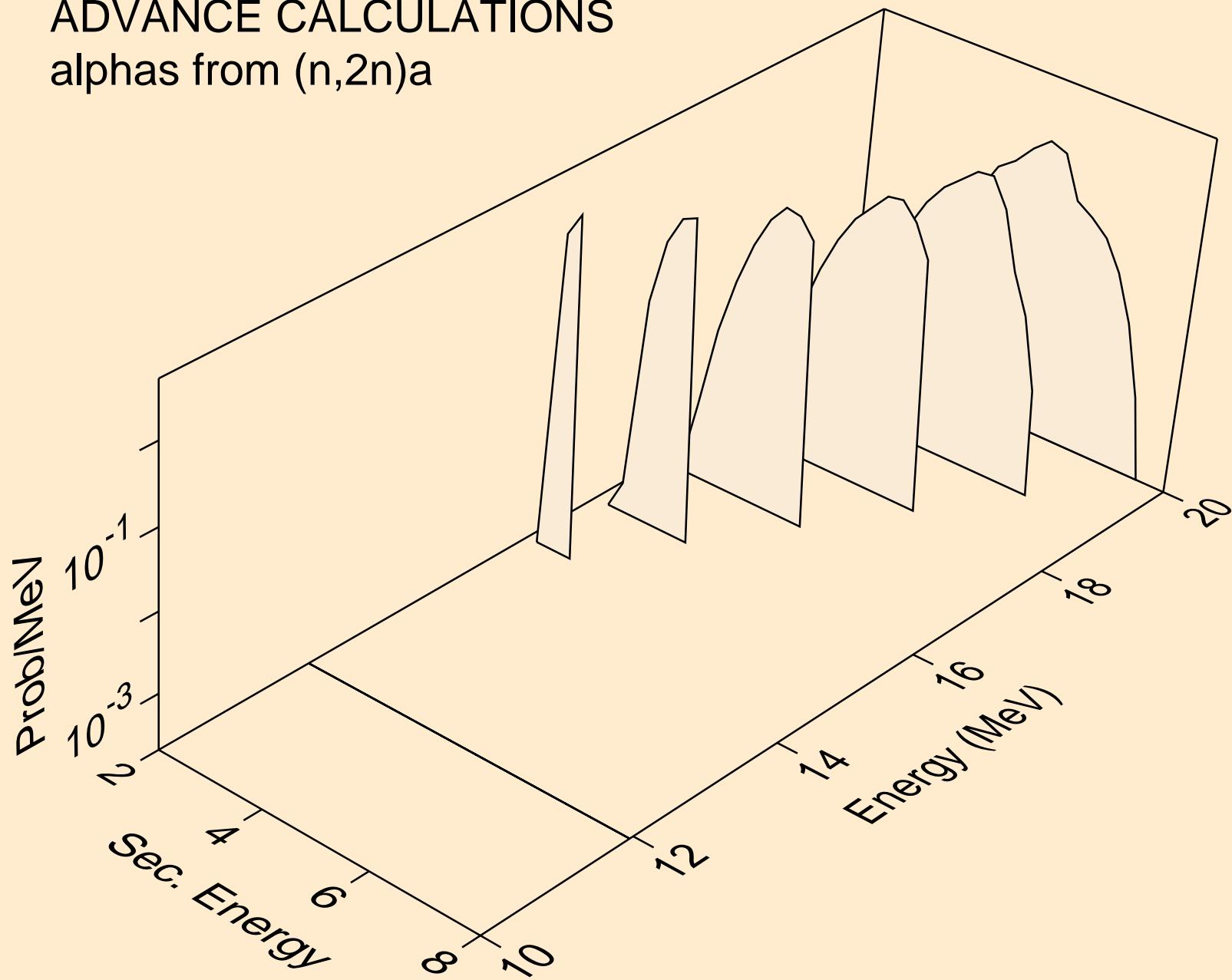
ADVANCE CALCULATIONS

alphas from $(n,n^*)a$



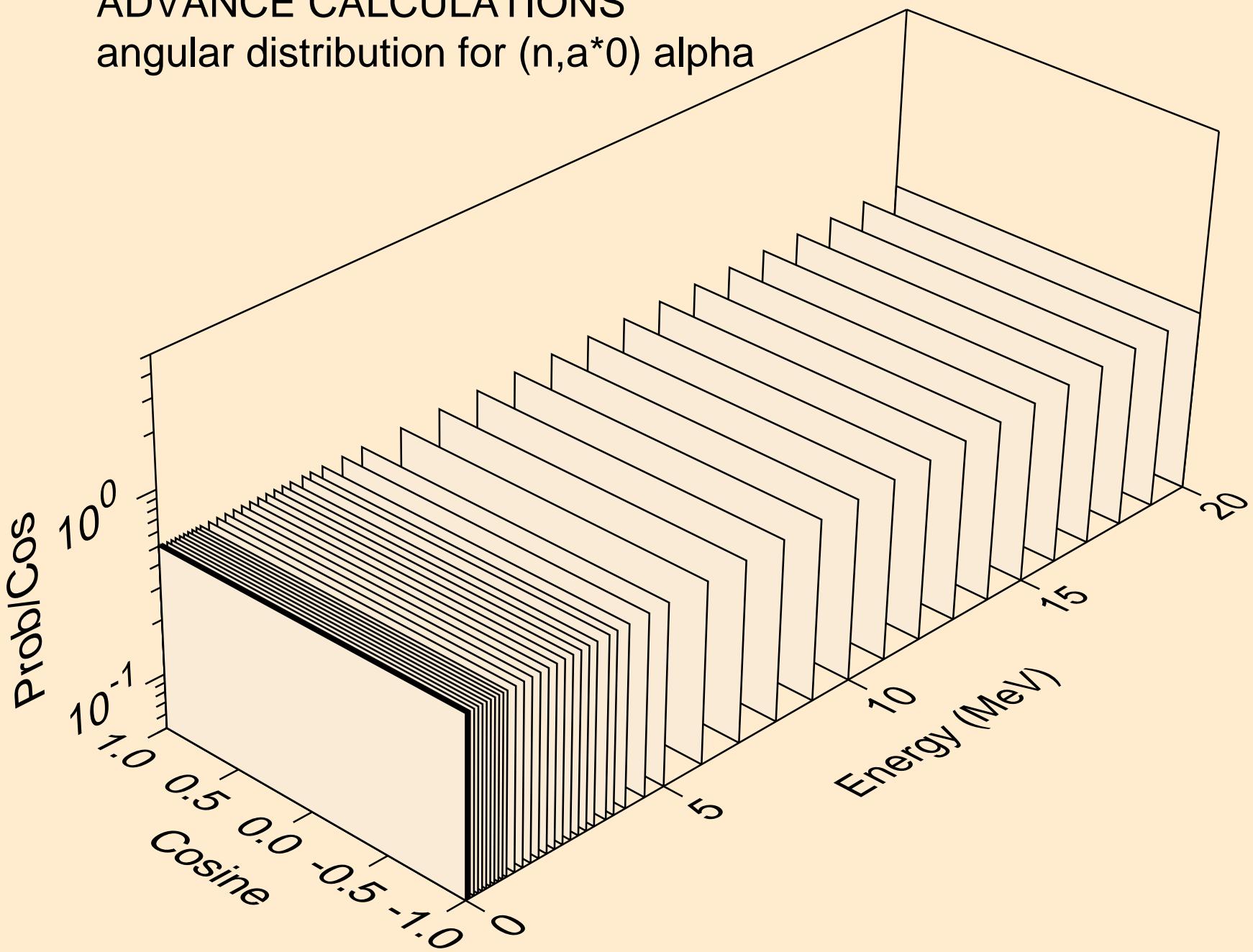
ADVANCE CALCULATIONS

alphas from $(n,2n)a$



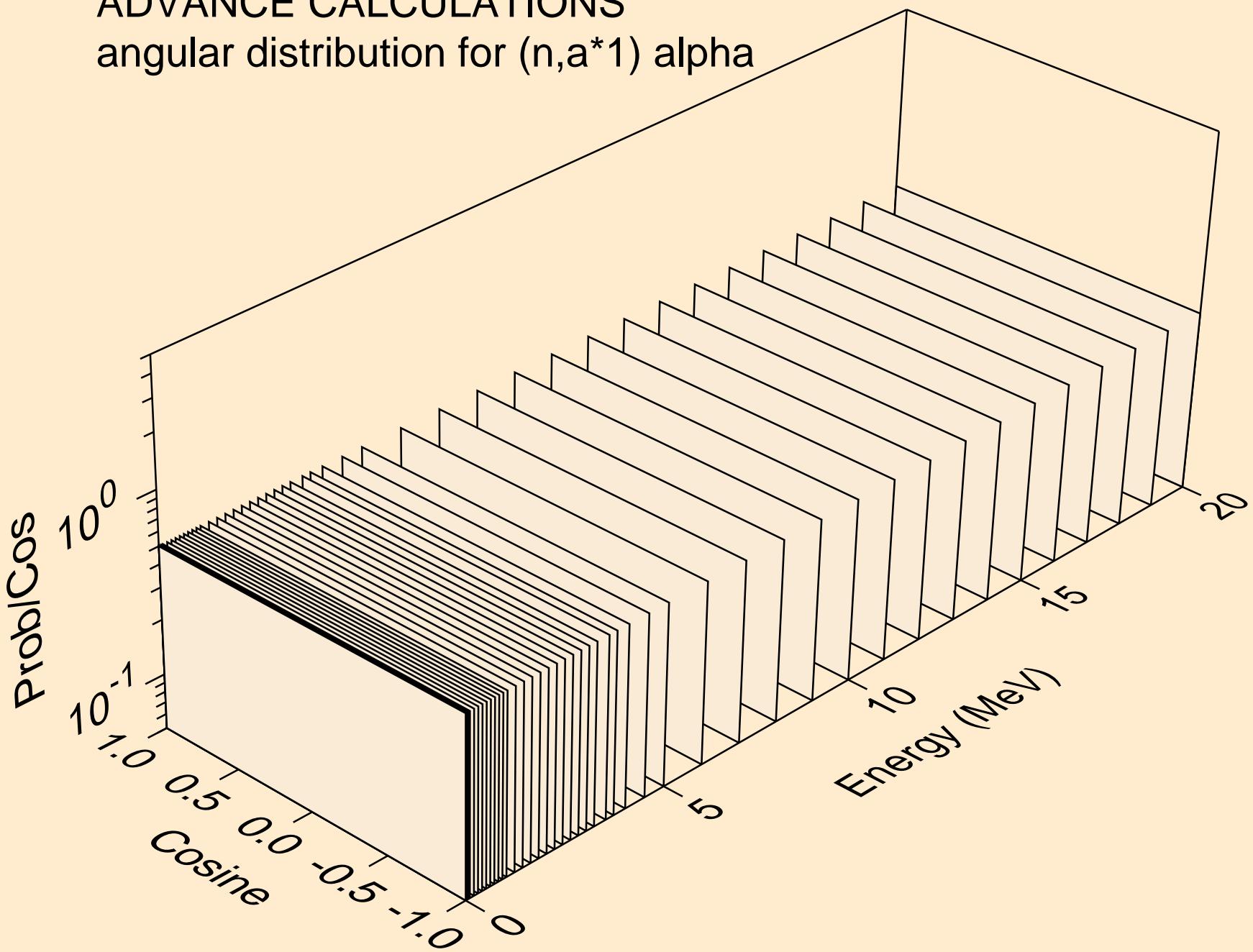
ADVANCE CALCULATIONS

angular distribution for (n,a^*0) alpha



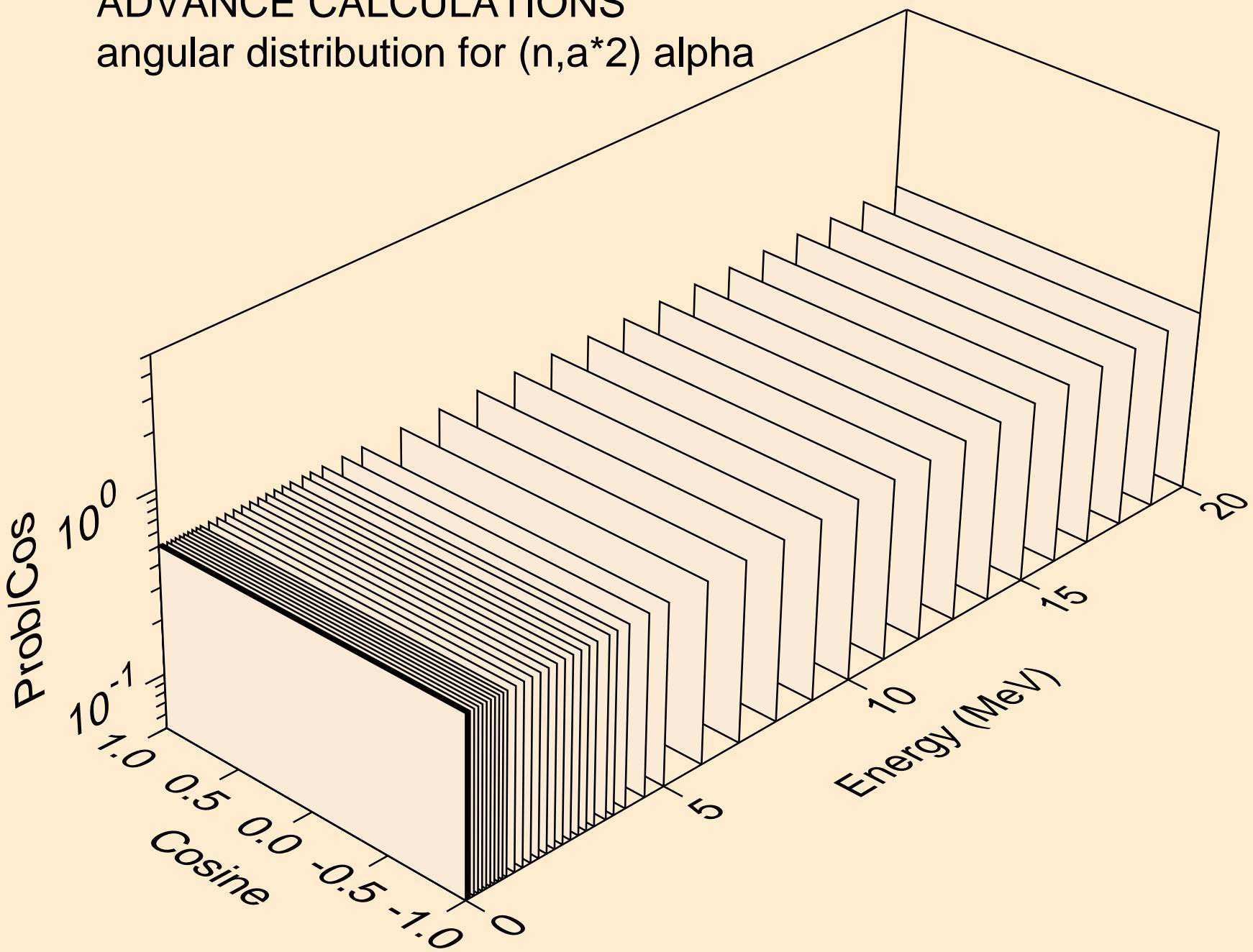
ADVANCE CALCULATIONS

angular distribution for (n,a*1) alpha



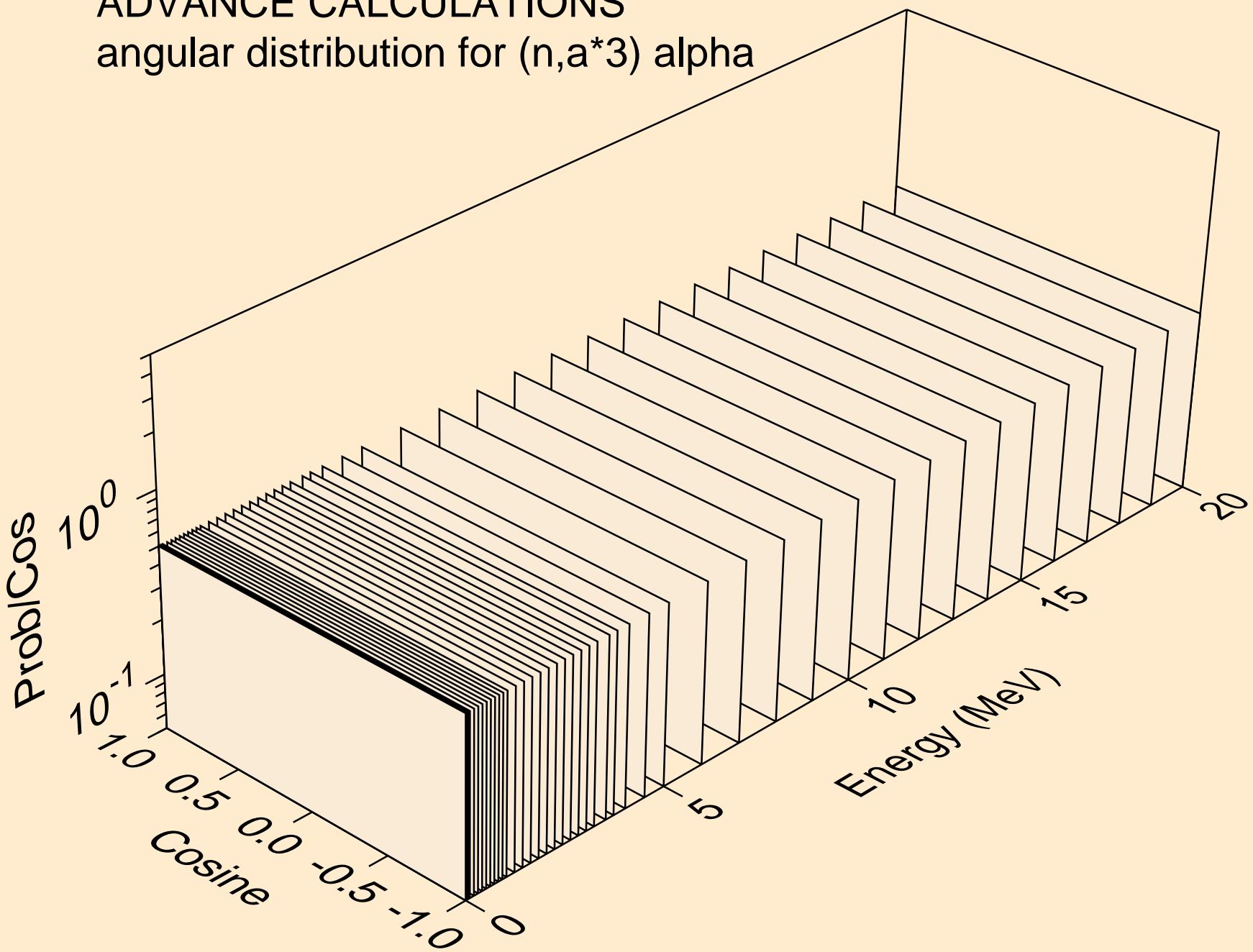
ADVANCE CALCULATIONS

angular distribution for (n,a^*2) alpha



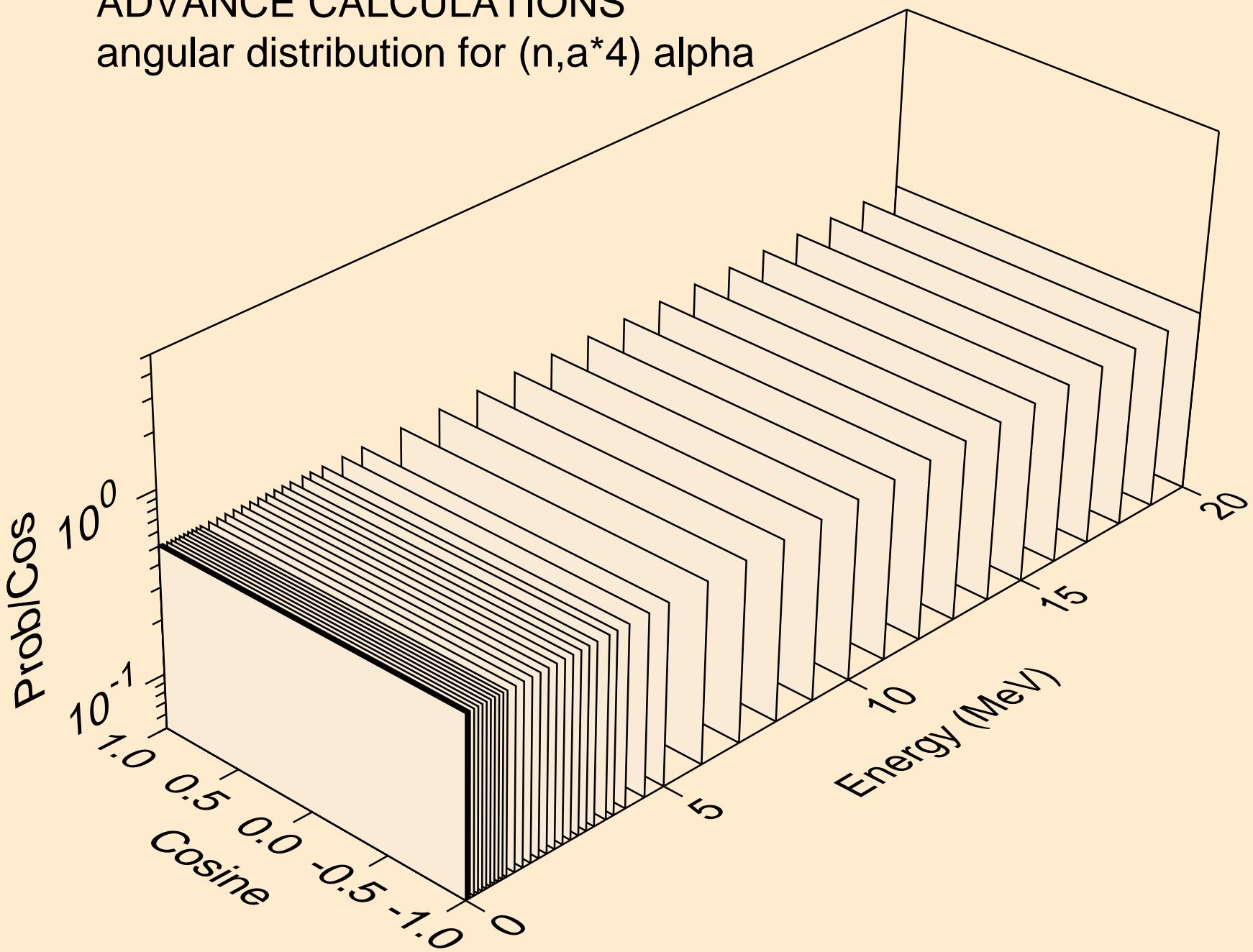
ADVANCE CALCULATIONS

angular distribution for (n,a*3) alpha



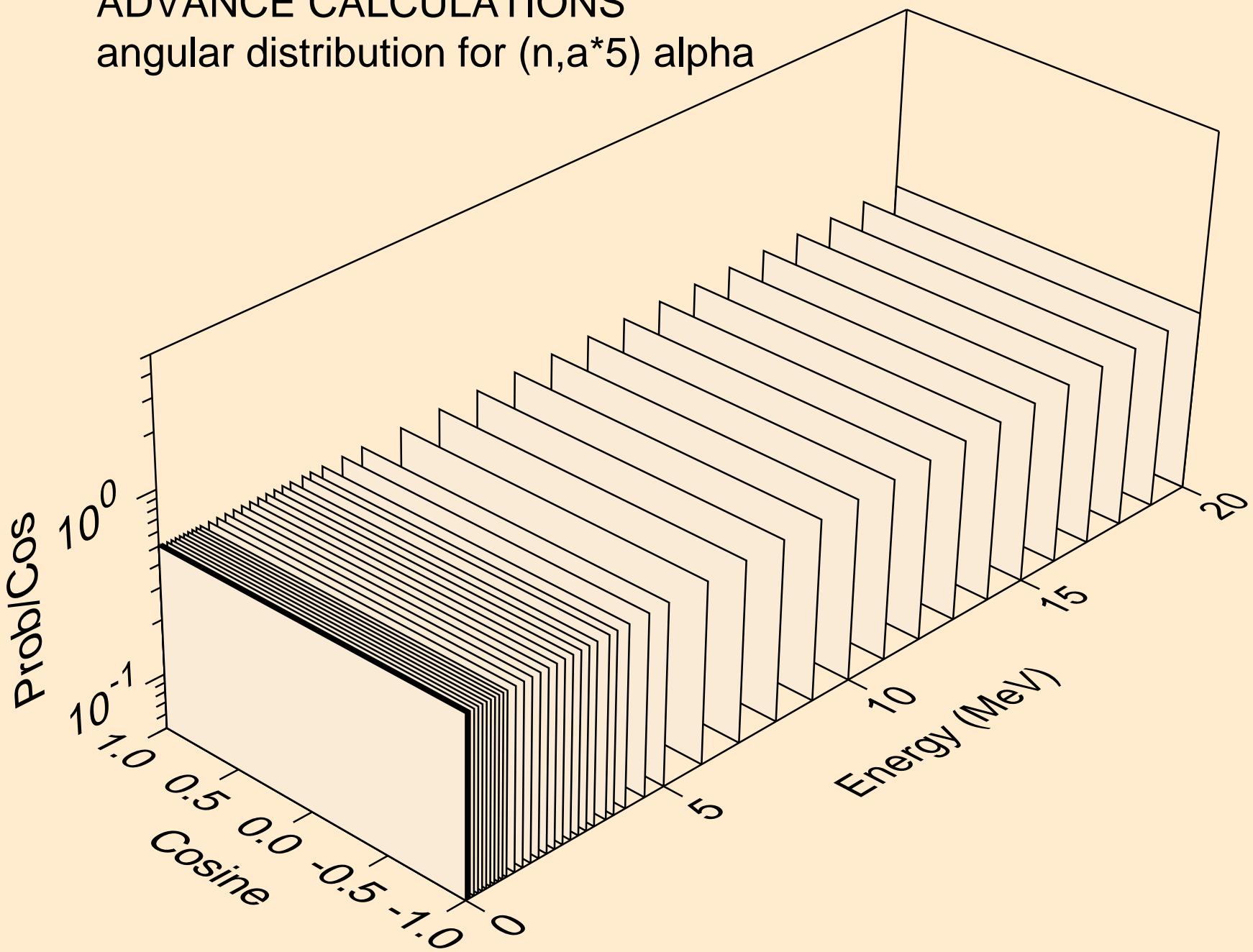
ADVANCE CALCULATIONS

angular distribution for (n,a*4) alpha



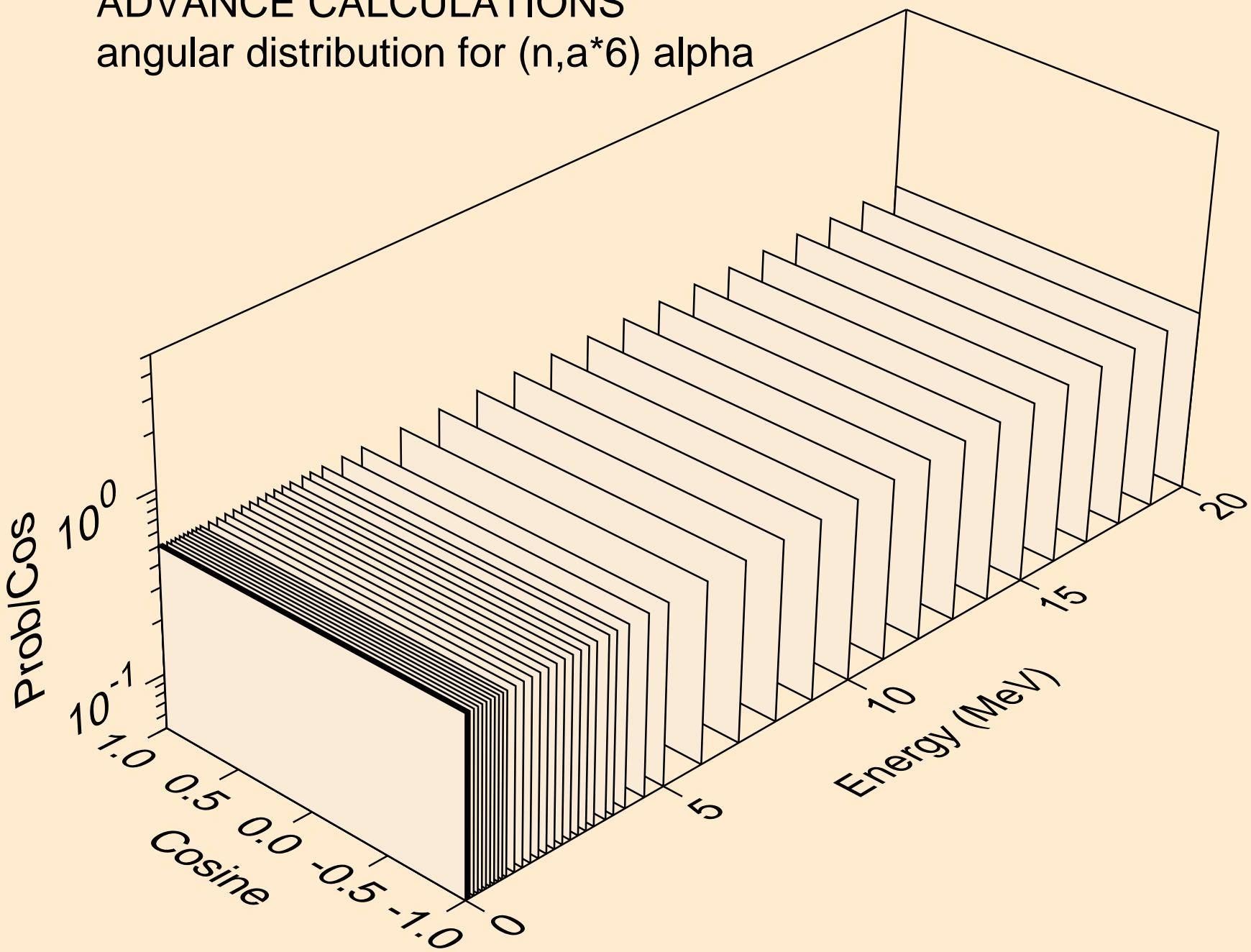
ADVANCE CALCULATIONS

angular distribution for (n,a*5) alpha



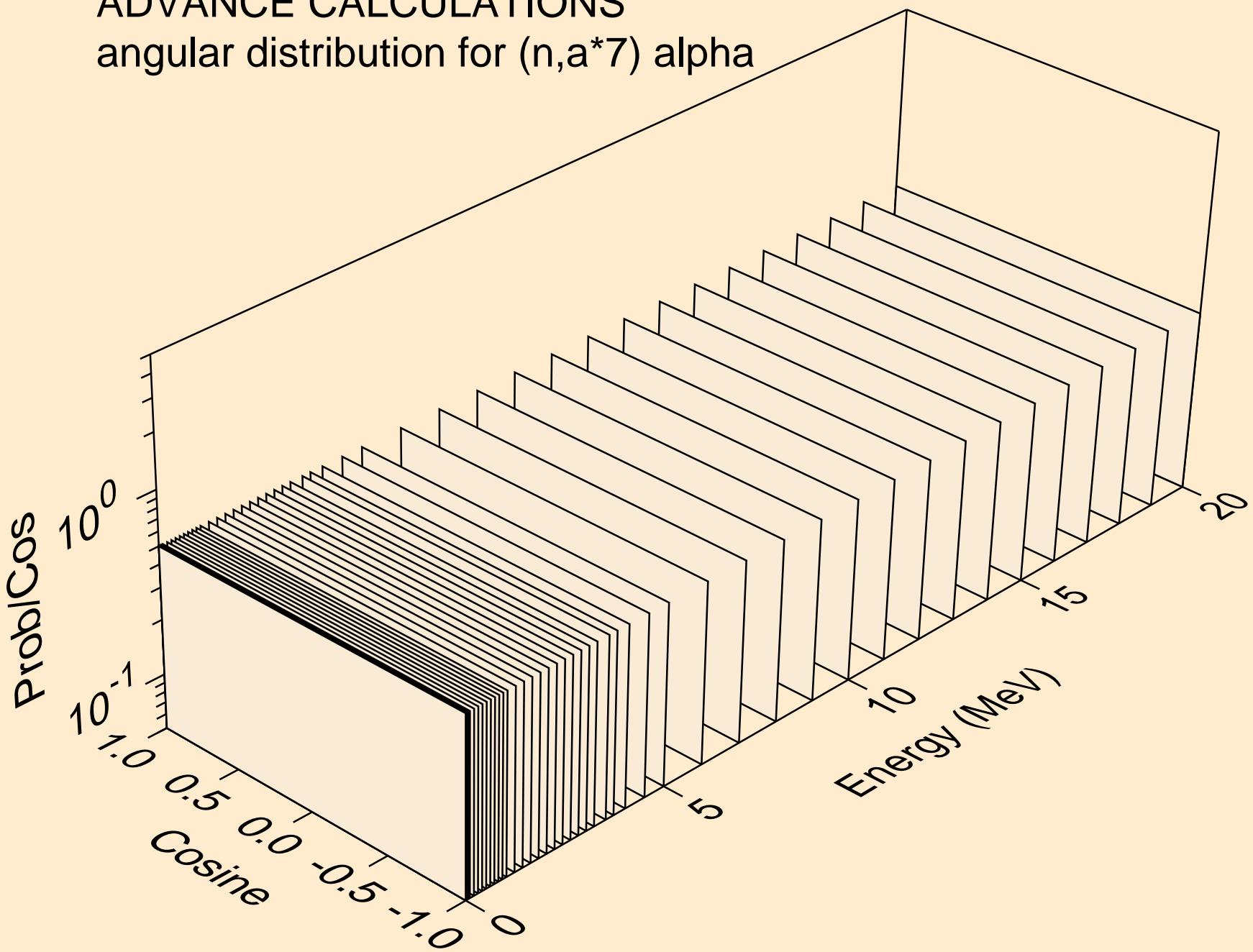
ADVANCE CALCULATIONS

angular distribution for (n,a*6) alpha



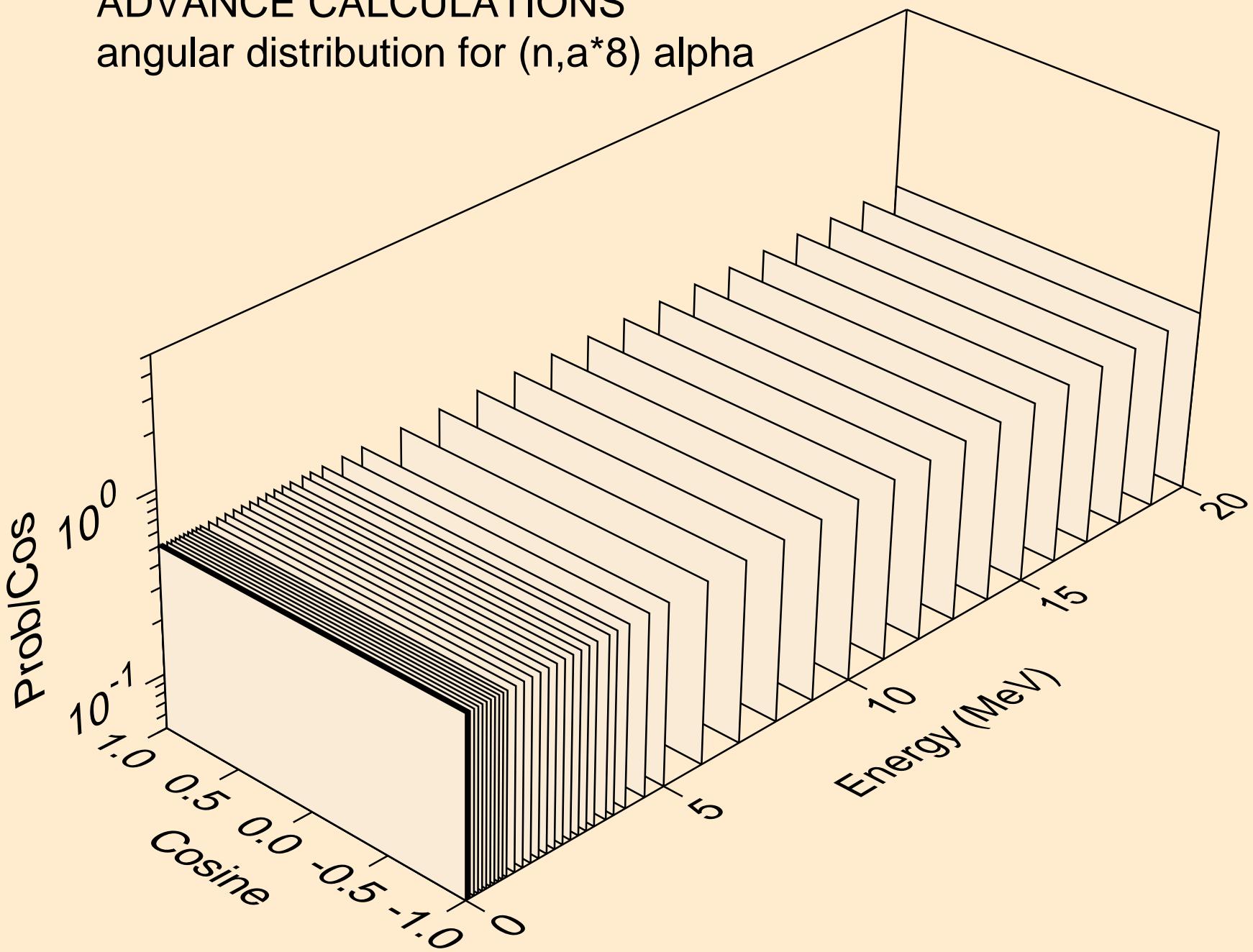
ADVANCE CALCULATIONS

angular distribution for ($n, a^* 7$) alpha



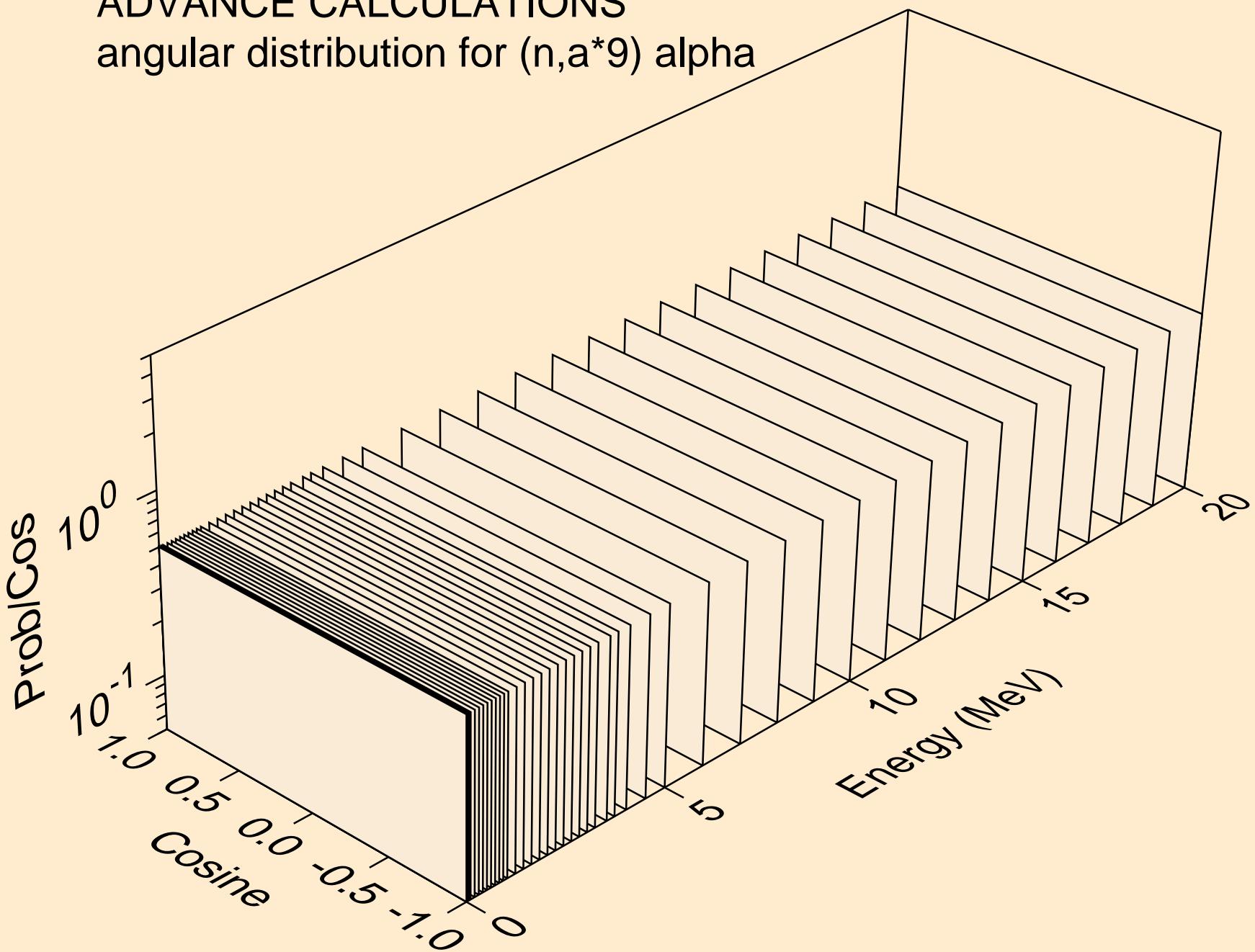
ADVANCE CALCULATIONS

angular distribution for (n,a*8) alpha



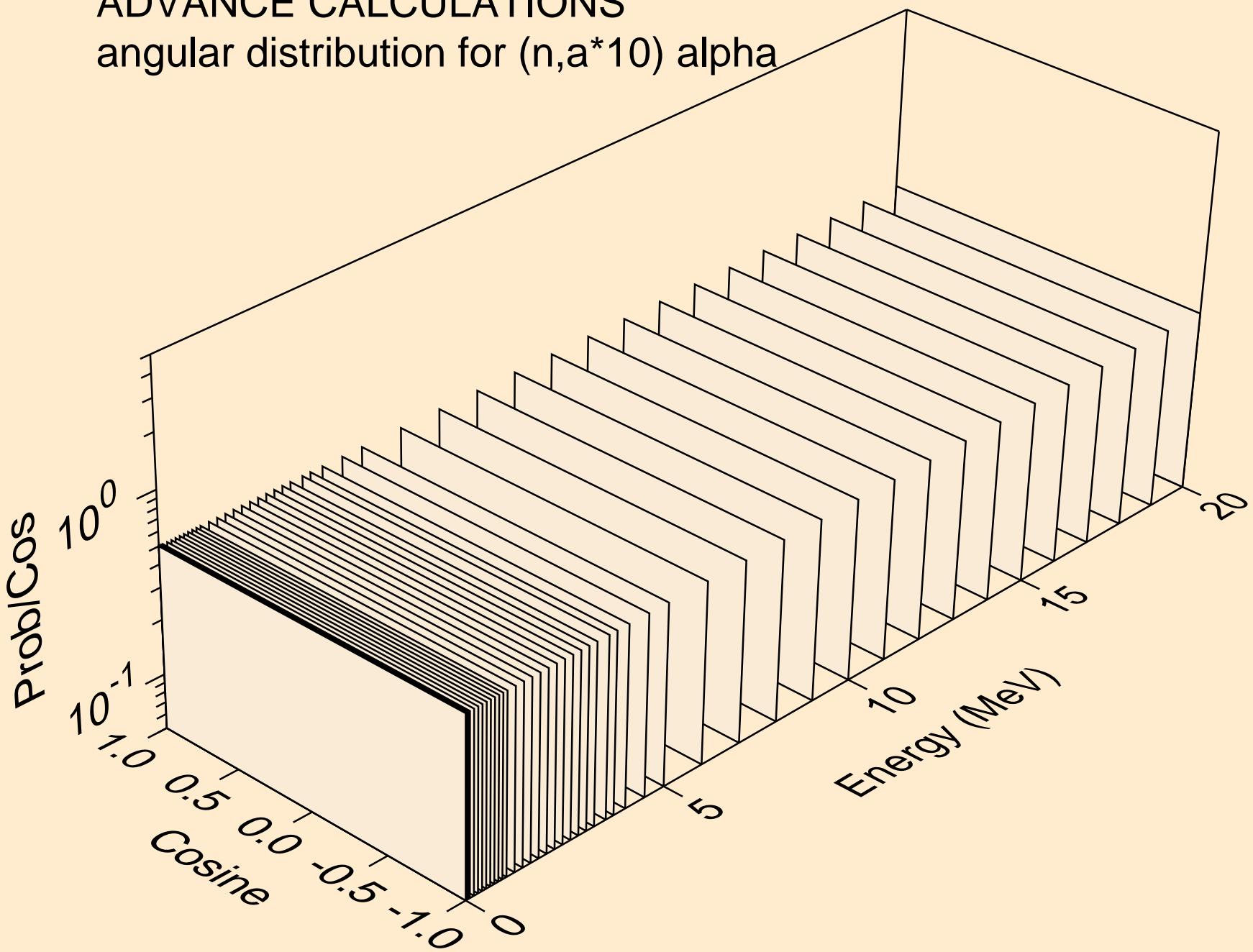
ADVANCE CALCULATIONS

angular distribution for (n,a*9) alpha



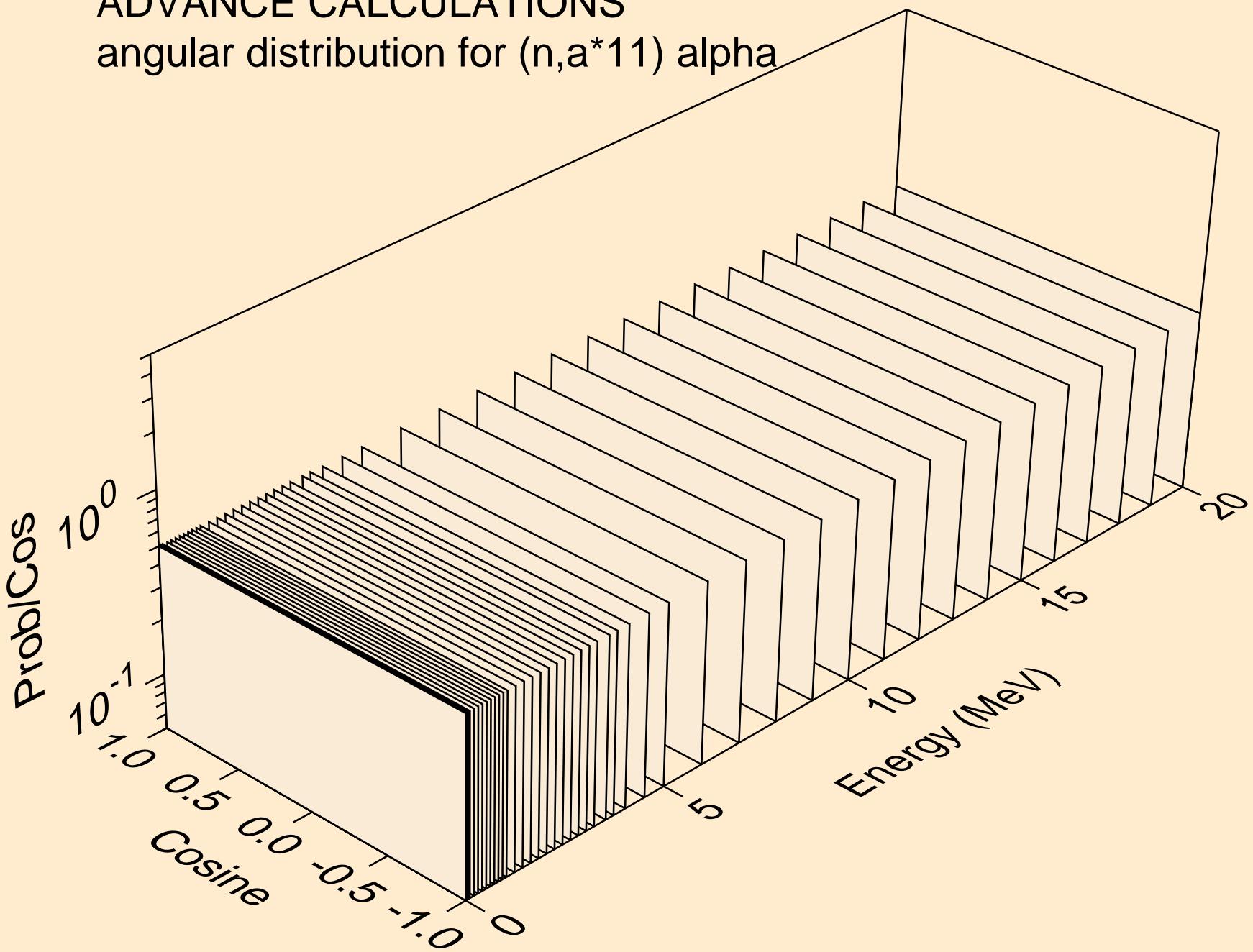
ADVANCE CALCULATIONS

angular distribution for (n,a*10) alpha



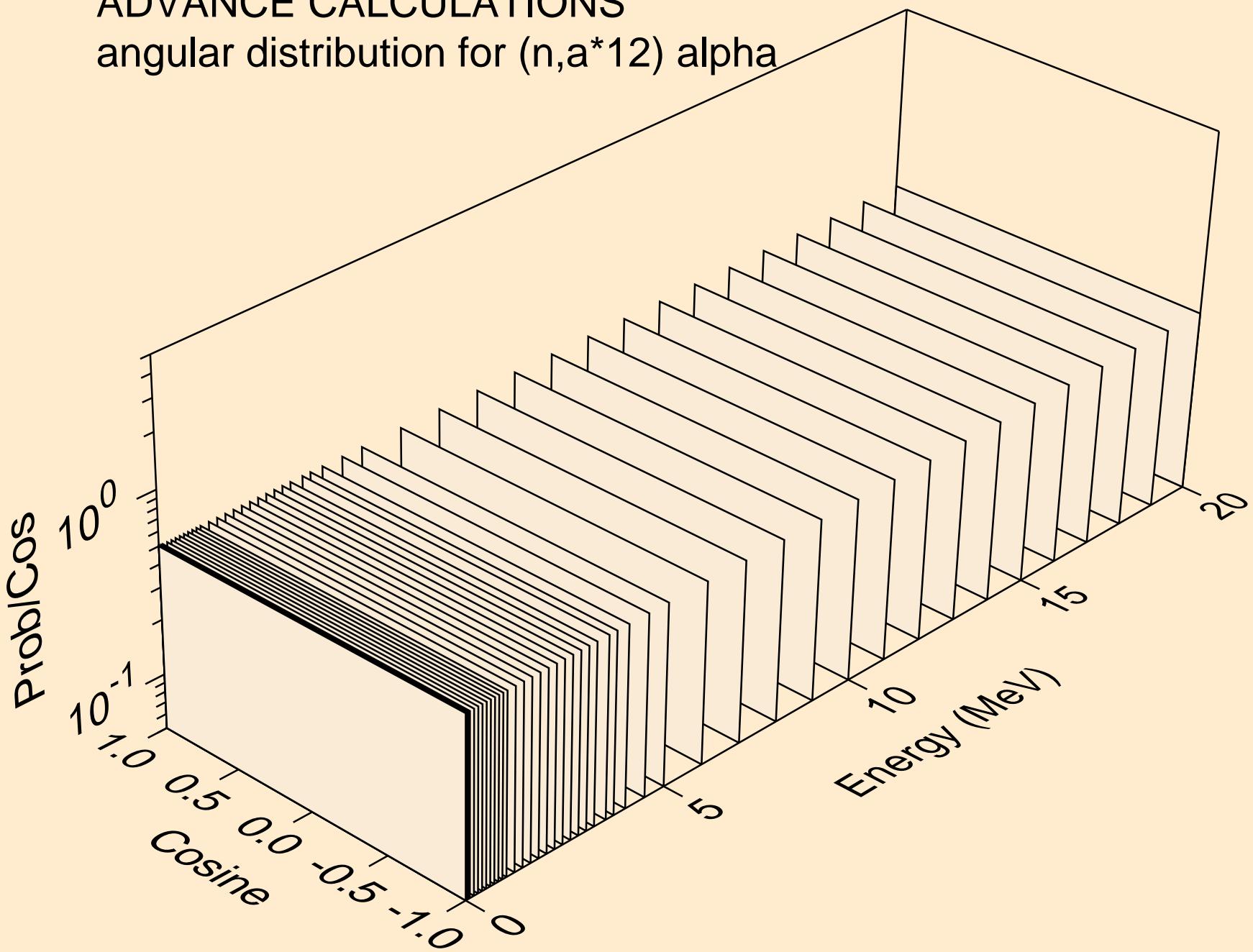
ADVANCE CALCULATIONS

angular distribution for (n,a*11) alpha



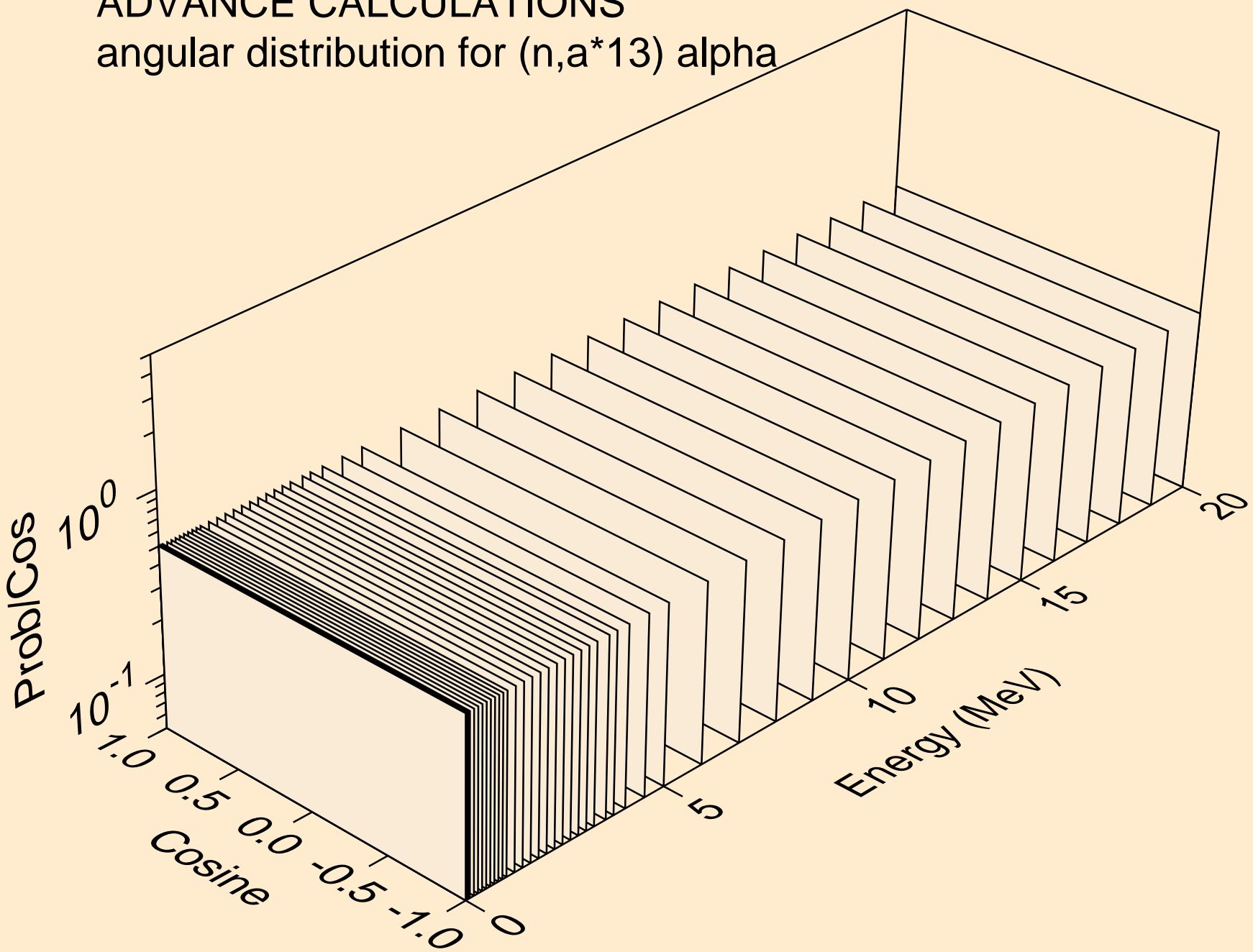
ADVANCE CALCULATIONS

angular distribution for (n,a*12) alpha



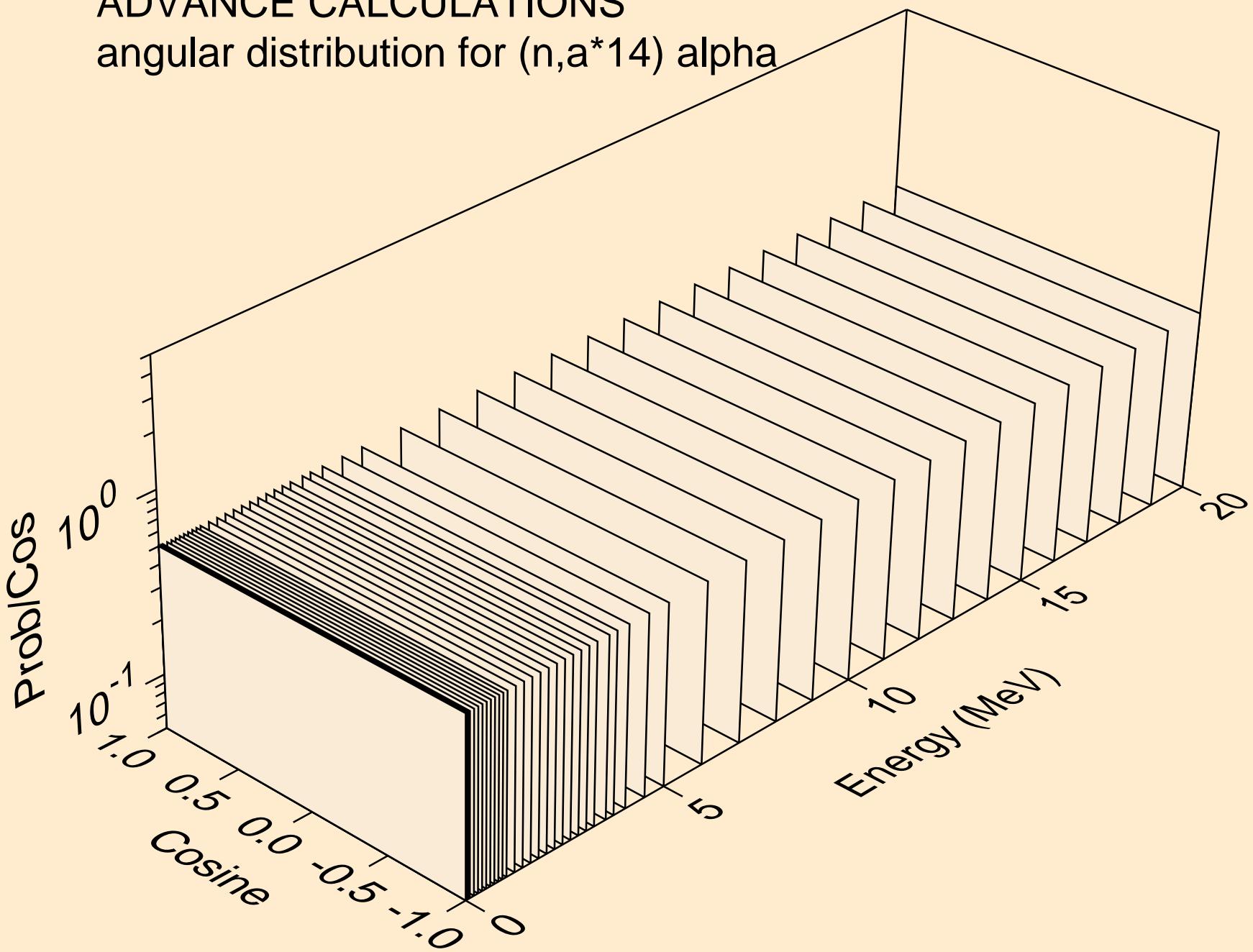
ADVANCE CALCULATIONS

angular distribution for (n,a*13) alpha



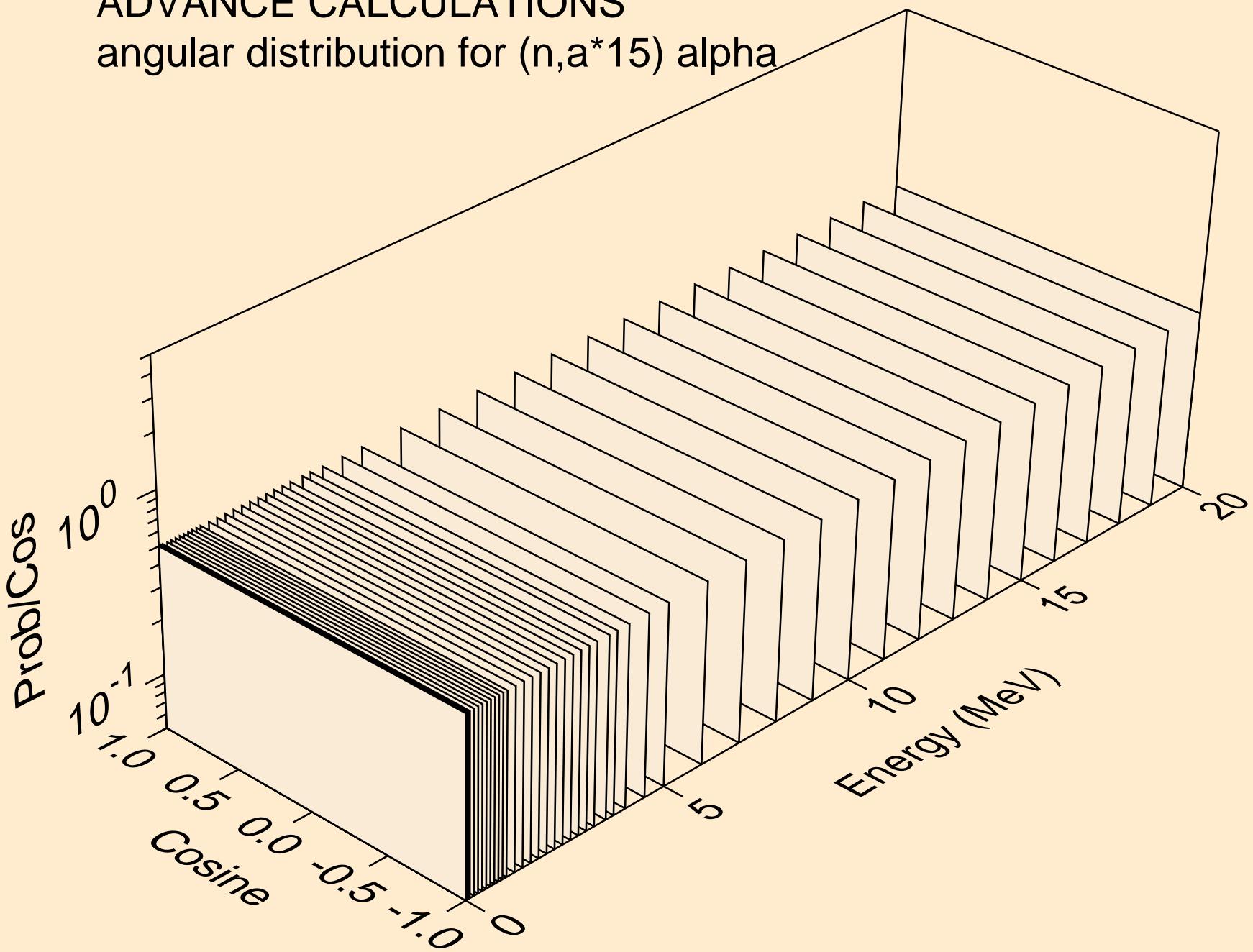
ADVANCE CALCULATIONS

angular distribution for ($n, a^* 14$) alpha



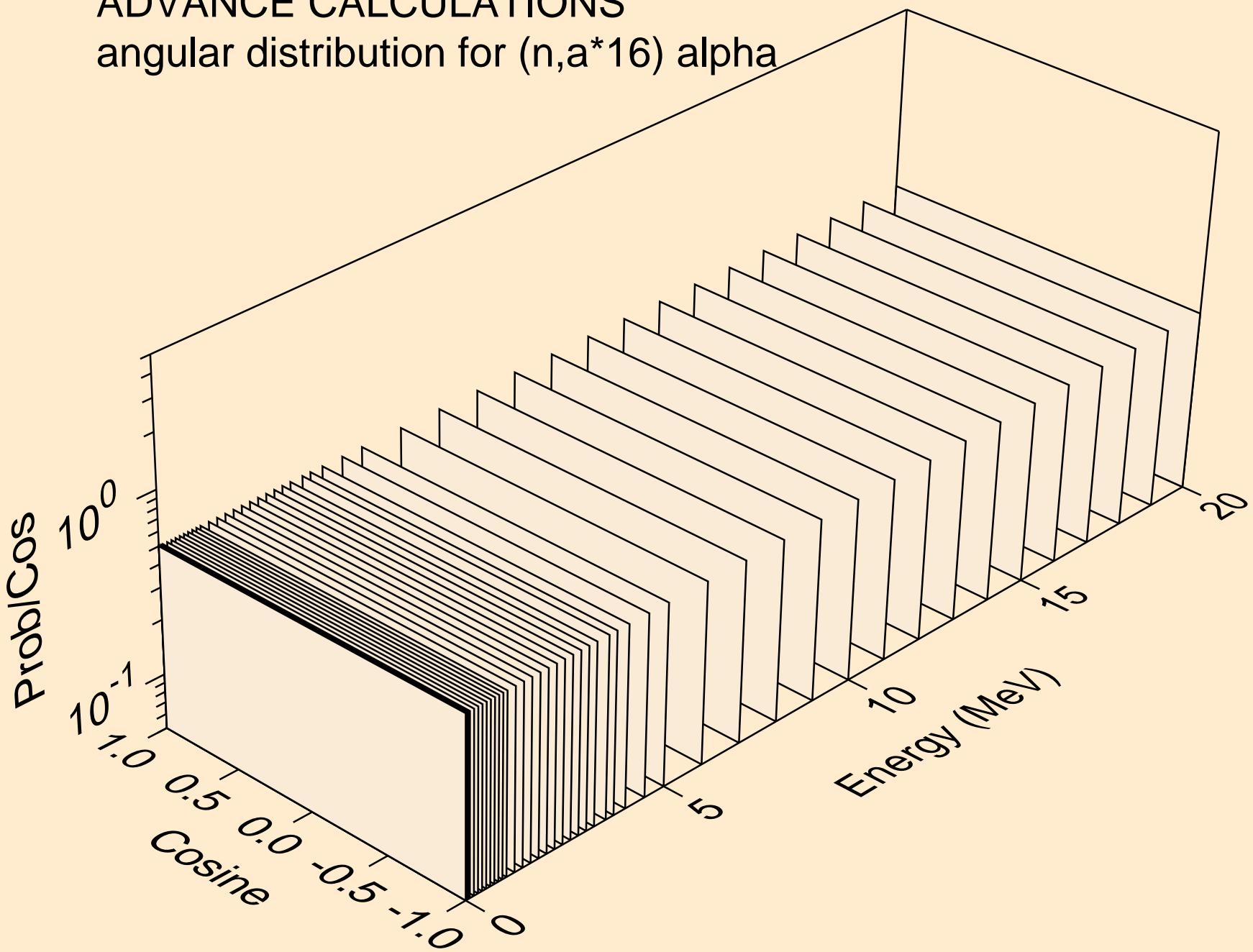
ADVANCE CALCULATIONS

angular distribution for (n,a^*15) alpha



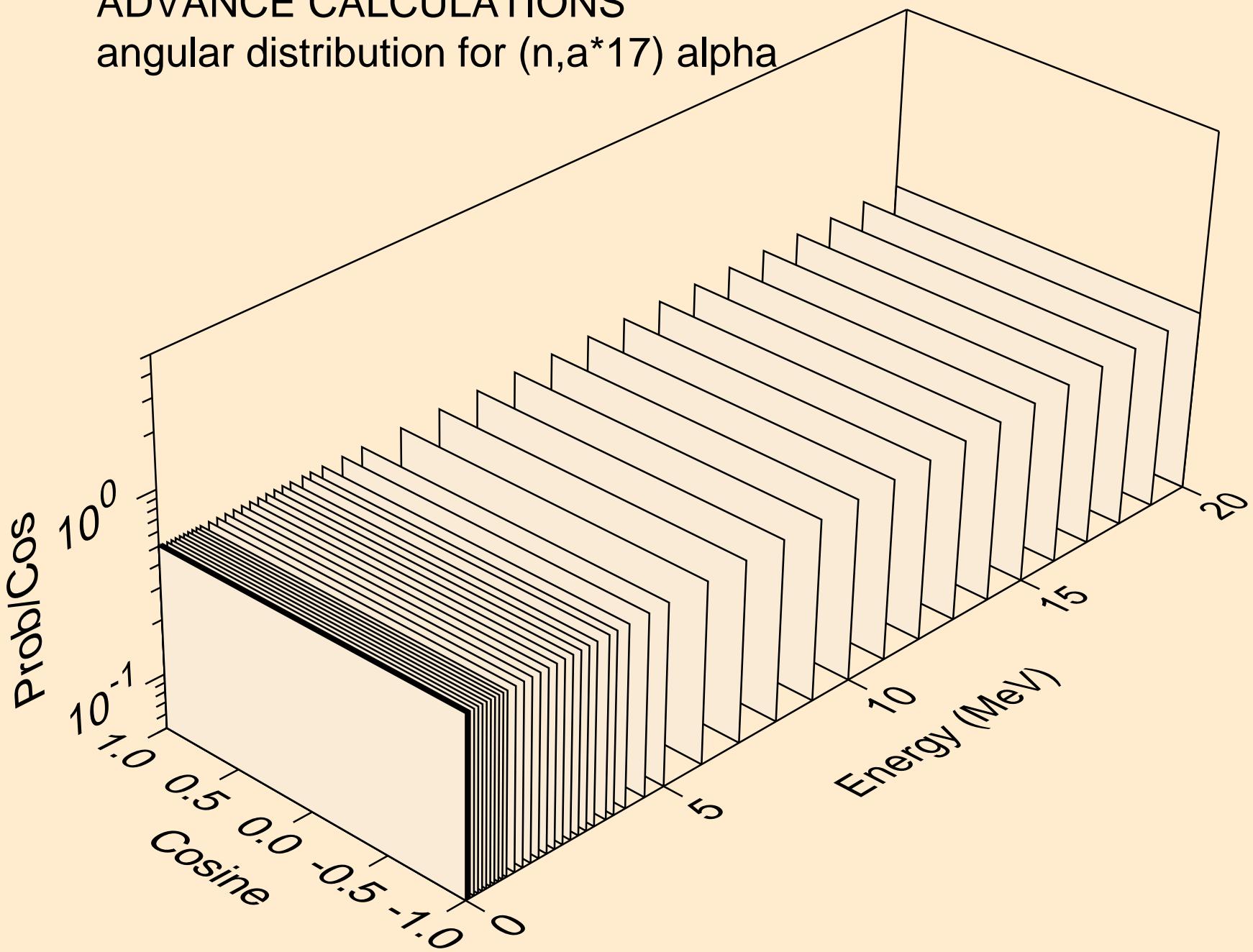
ADVANCE CALCULATIONS

angular distribution for ($n, a^* 16$) alpha



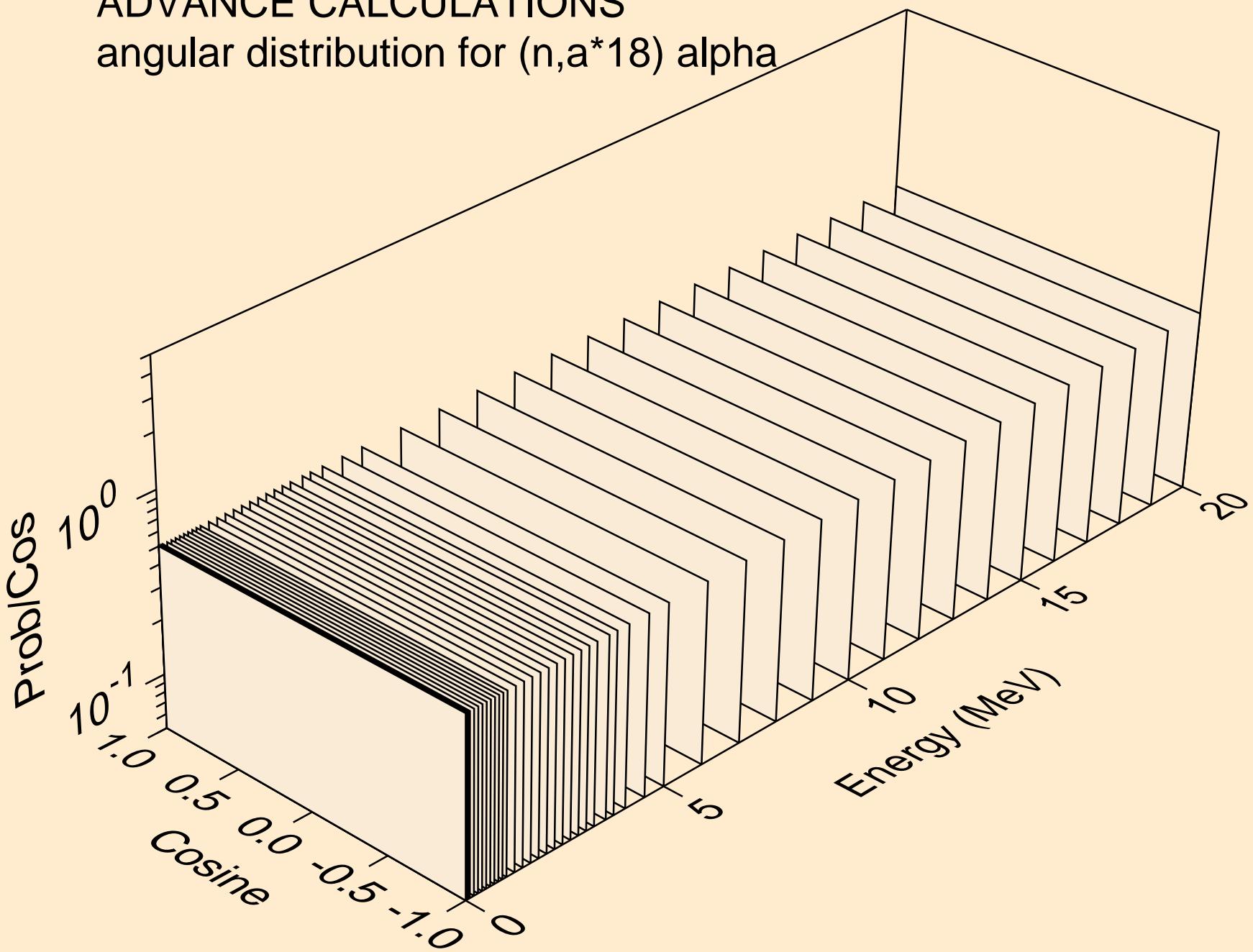
ADVANCE CALCULATIONS

angular distribution for (n,a^*17) alpha



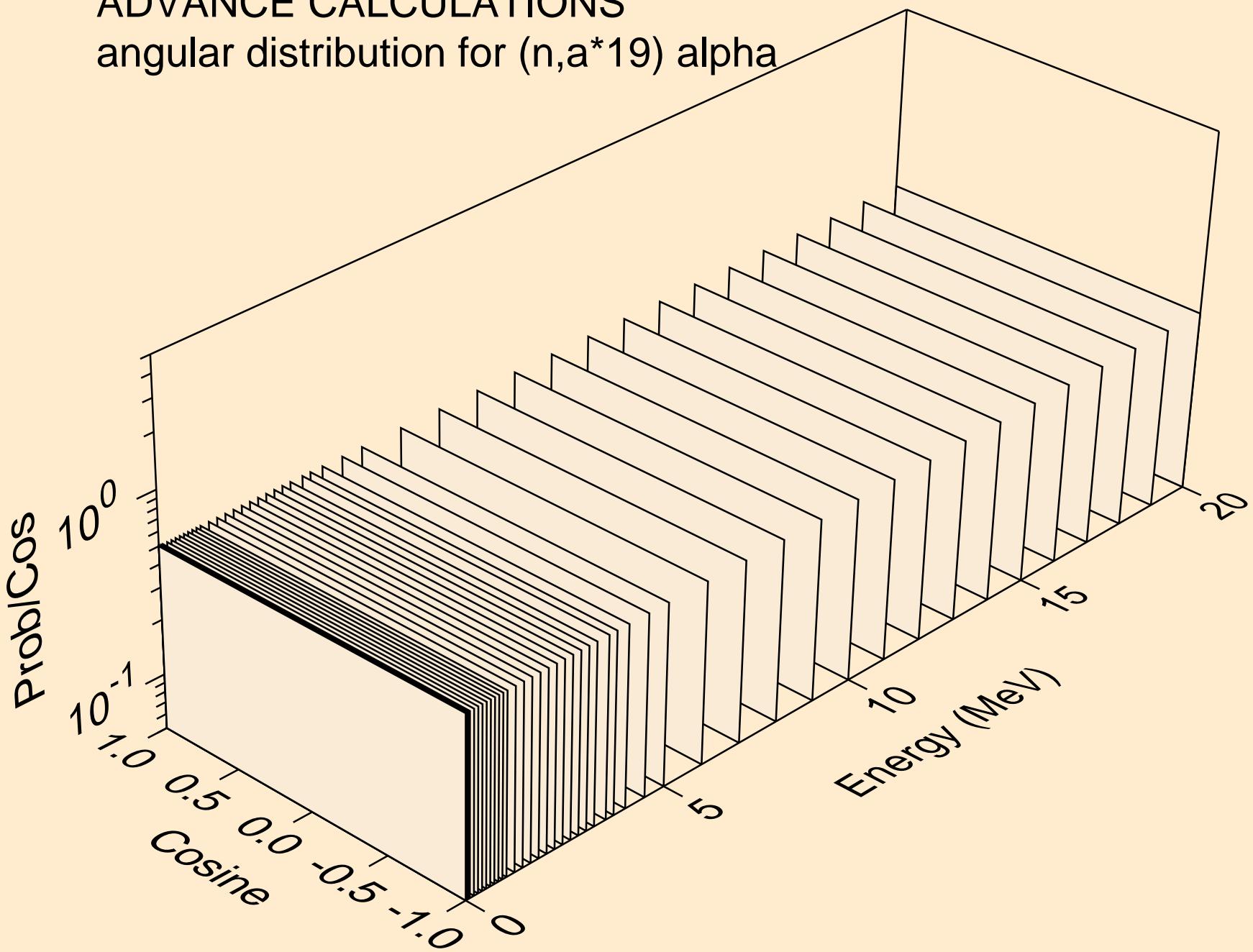
ADVANCE CALCULATIONS

angular distribution for (n,a^*18) alpha



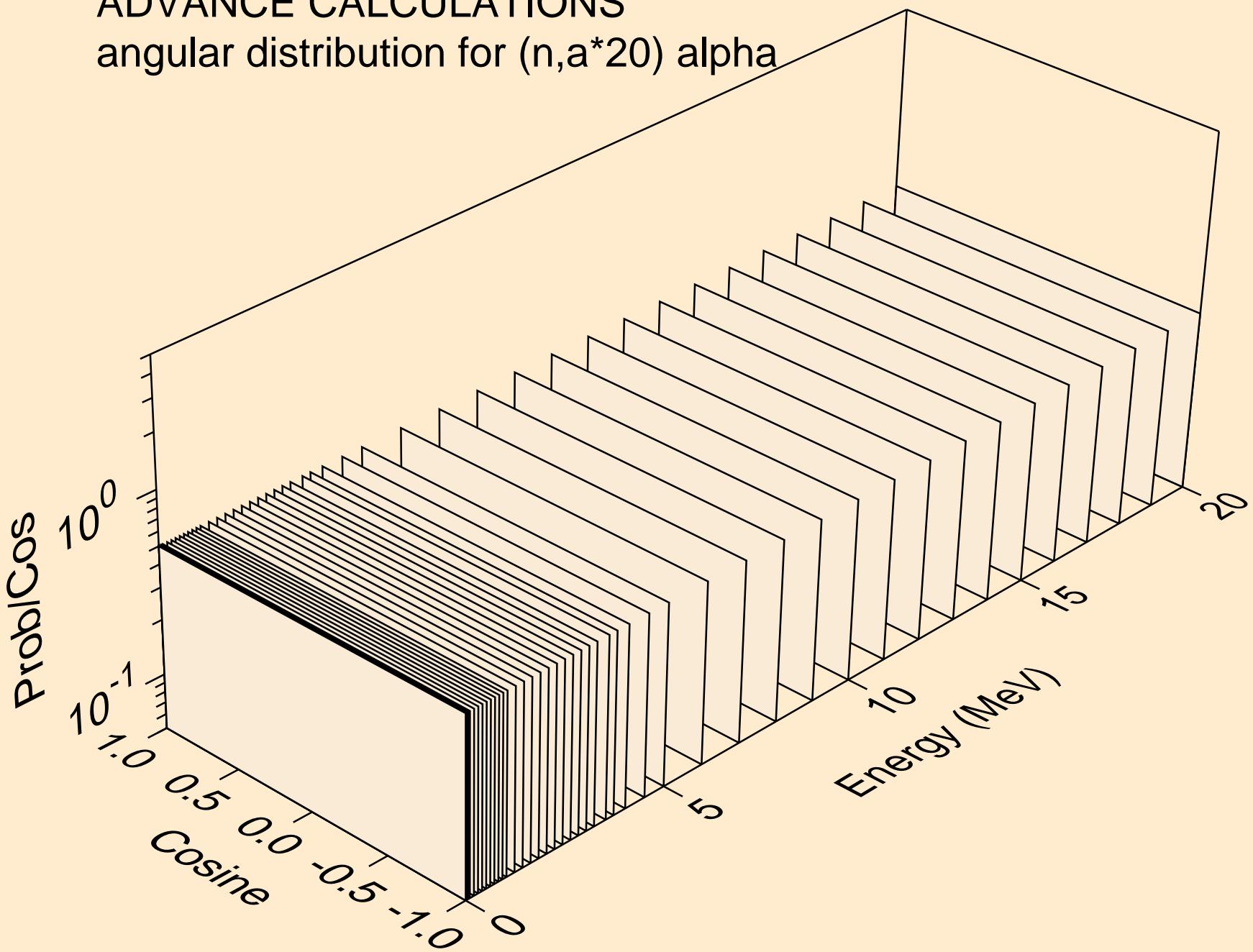
ADVANCE CALCULATIONS

angular distribution for (n,a^*19) alpha



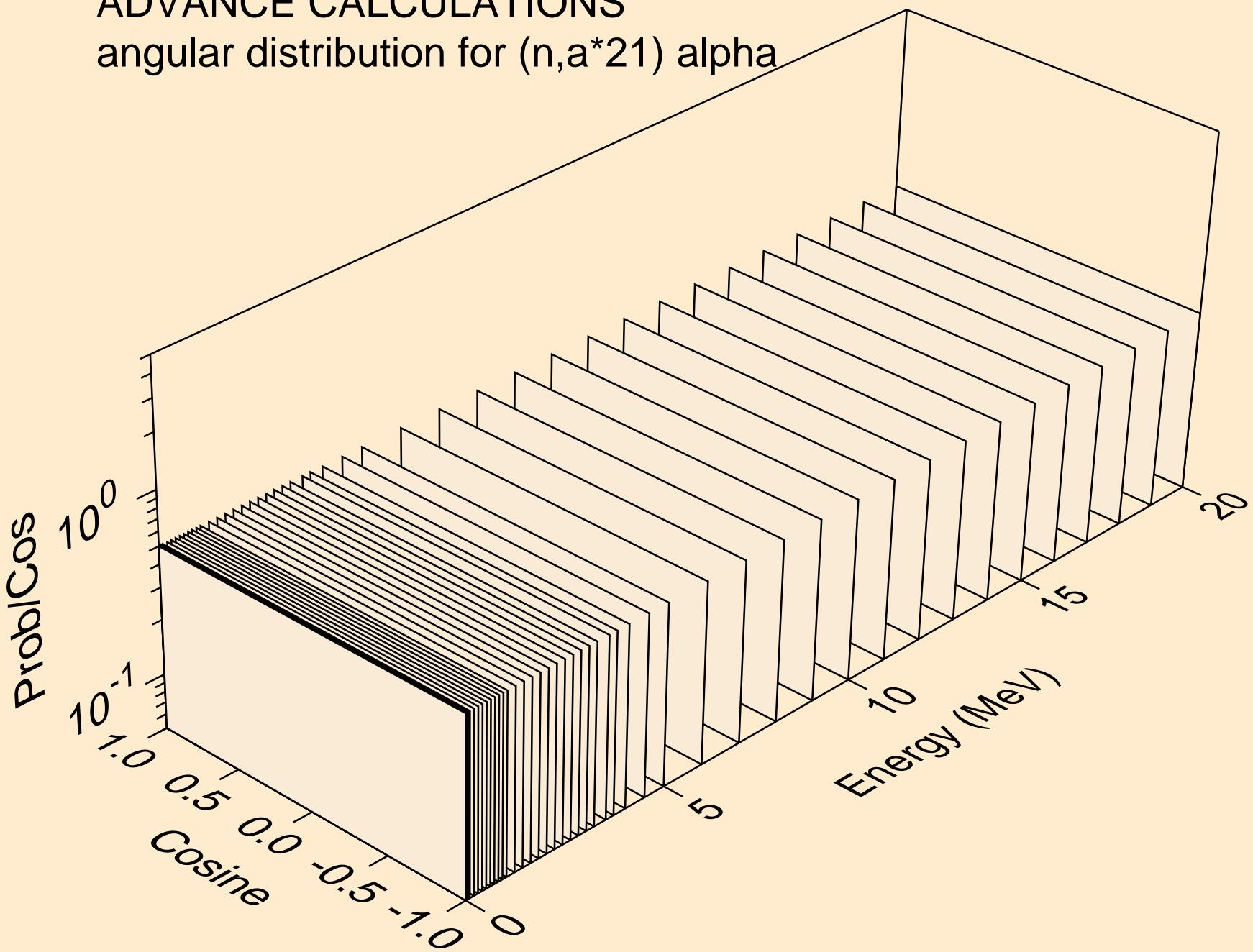
ADVANCE CALCULATIONS

angular distribution for (n,a^*20) alpha



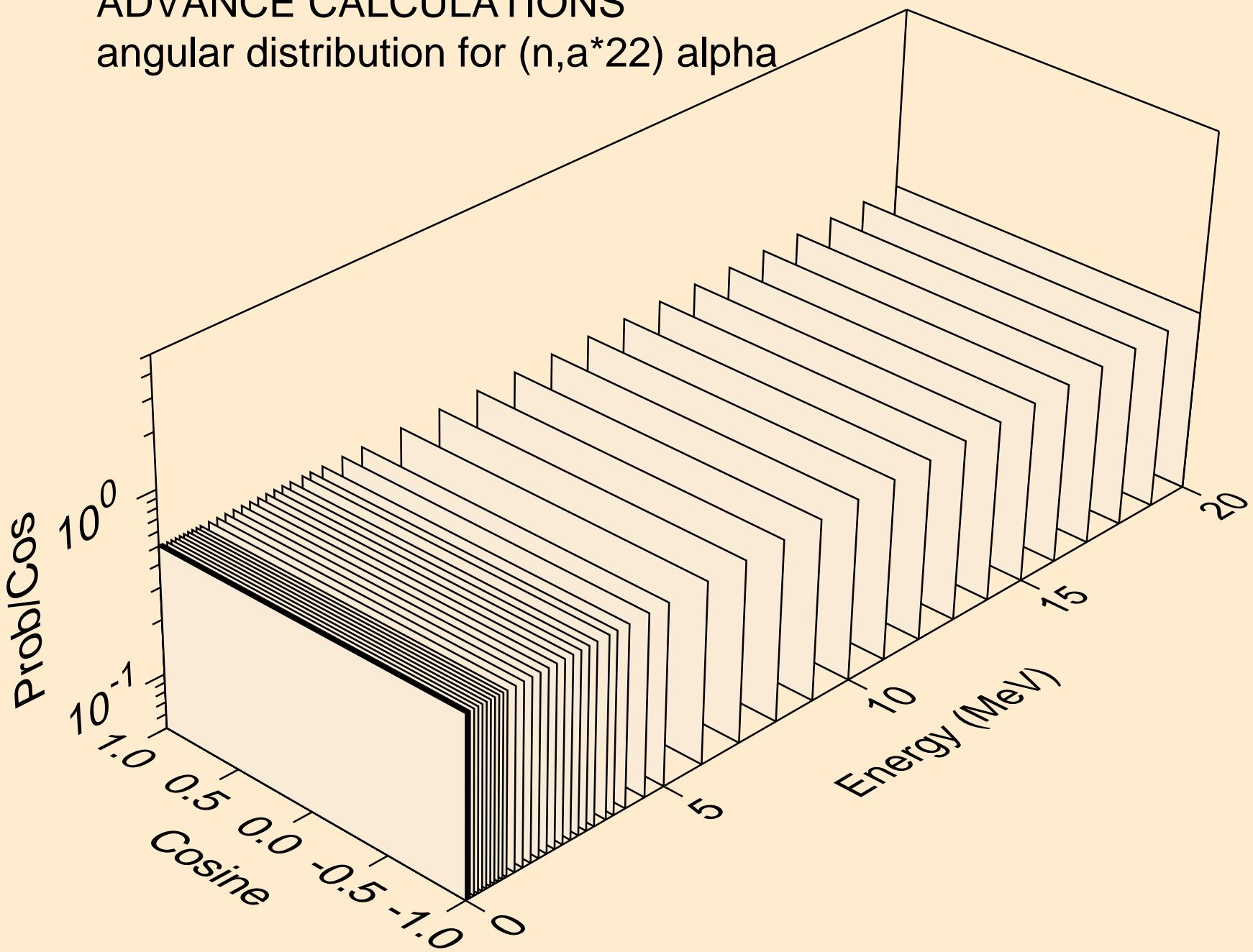
ADVANCE CALCULATIONS

angular distribution for ($n, a^* 21$) alpha



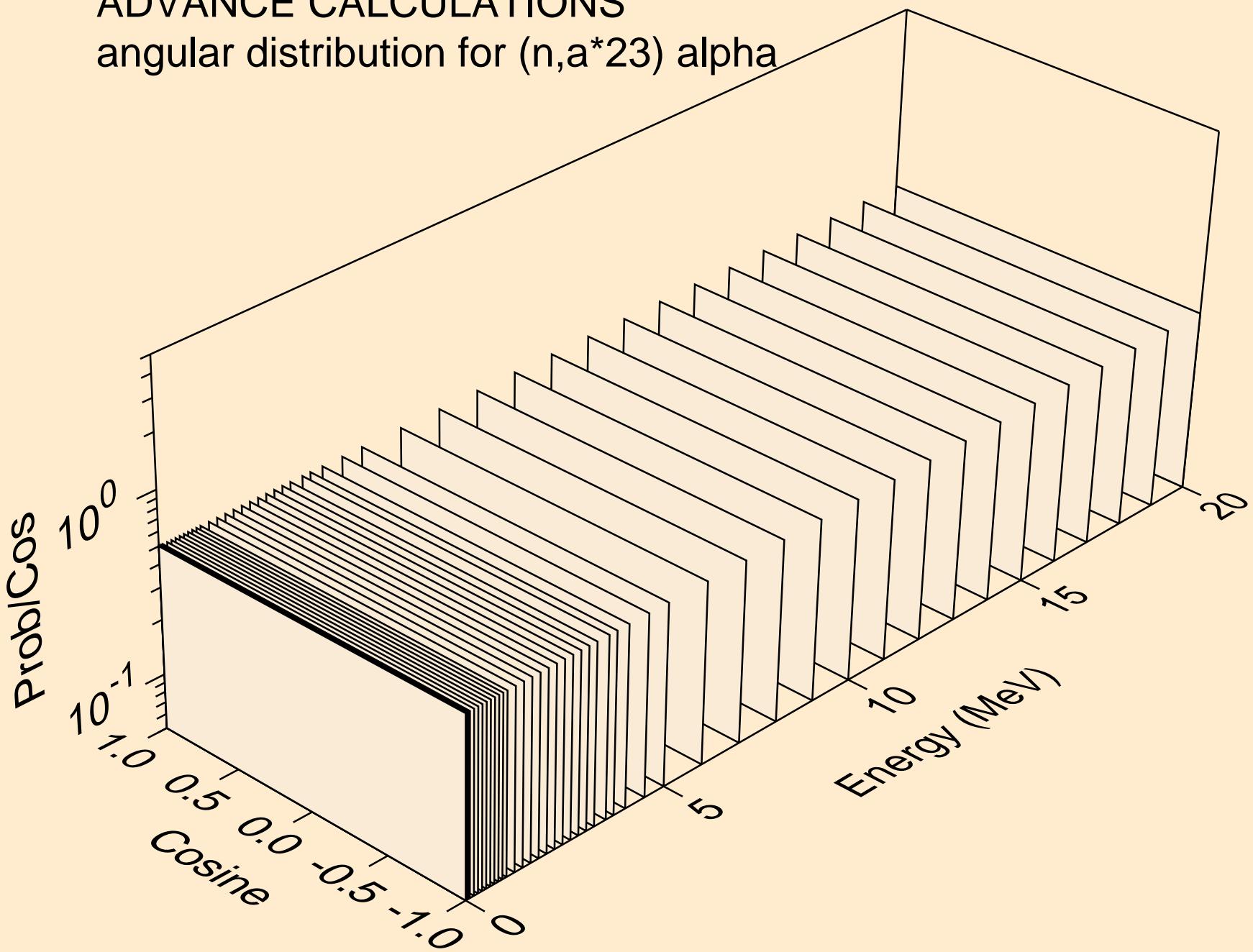
ADVANCE CALCULATIONS

angular distribution for ($n, a^* 22$) alpha



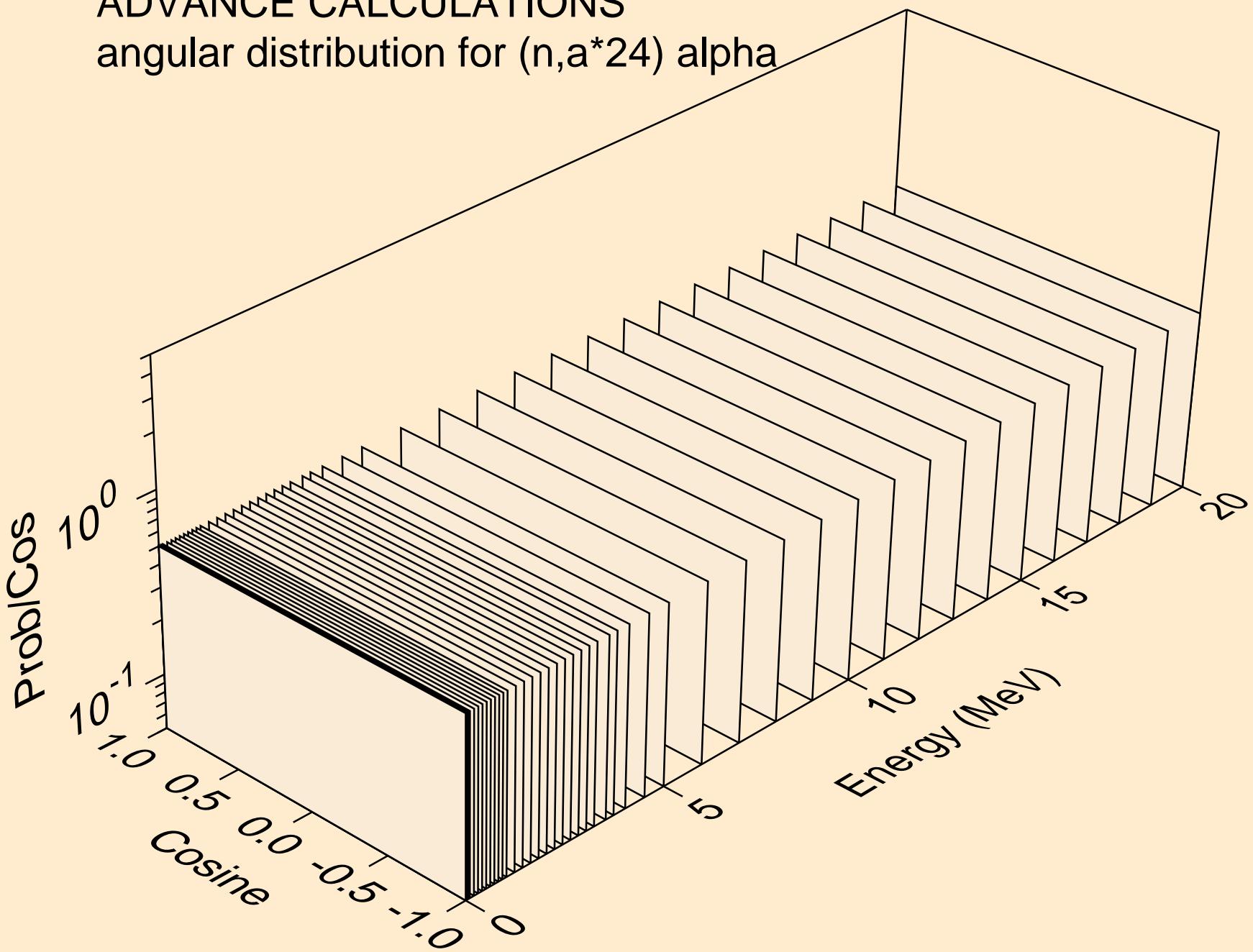
ADVANCE CALCULATIONS

angular distribution for ($n, a^* 23$) alpha



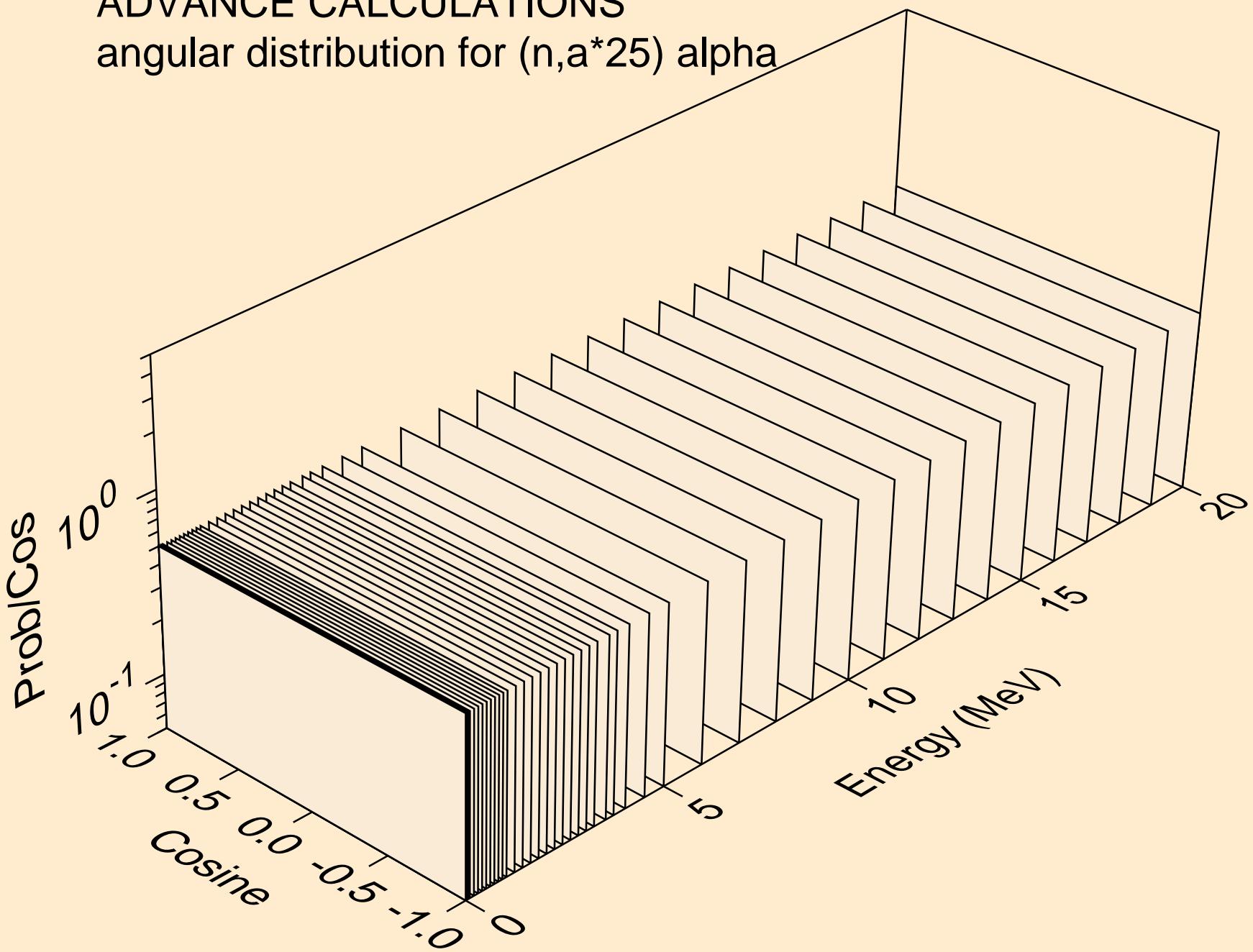
ADVANCE CALCULATIONS

angular distribution for ($n, a^* 24$) alpha



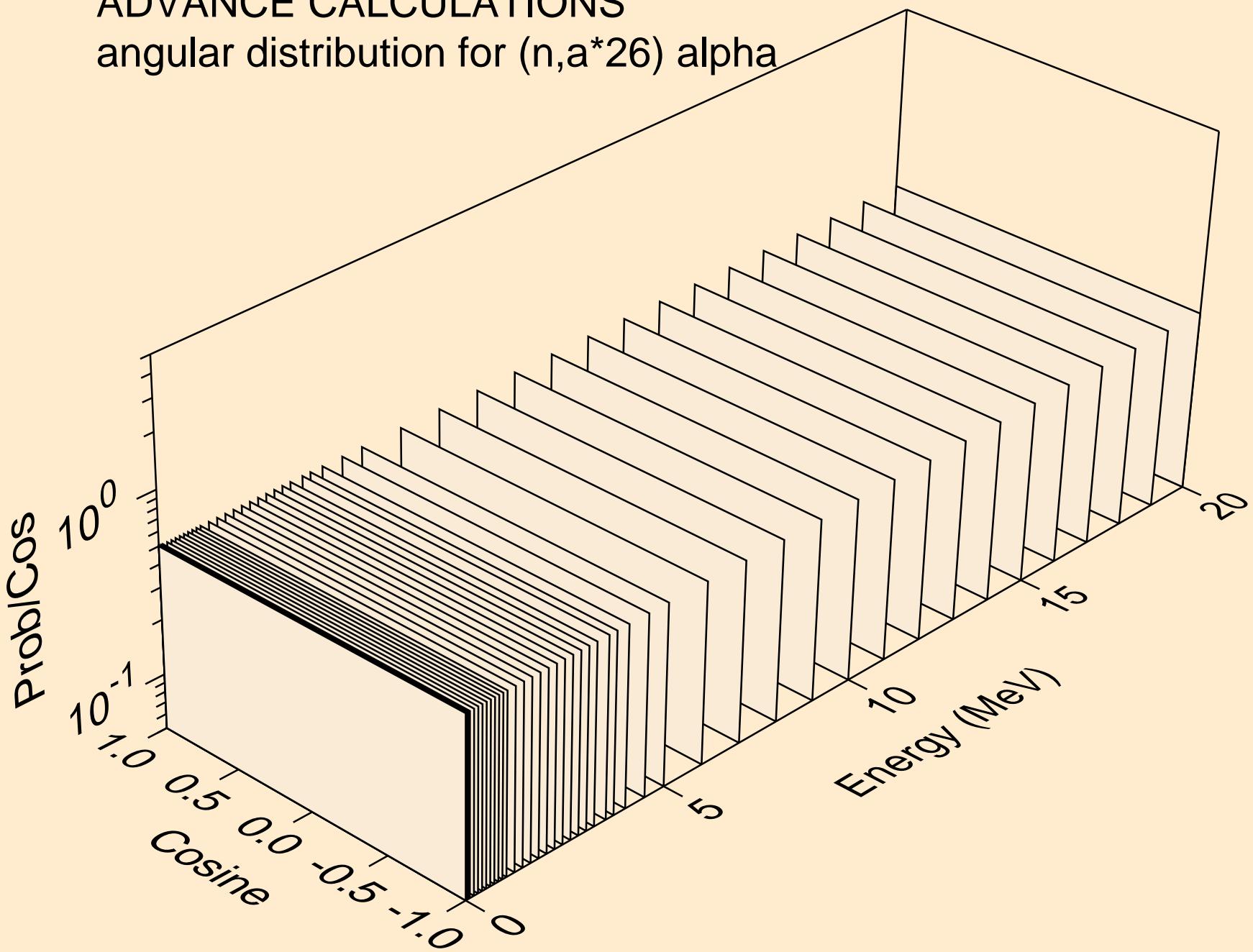
ADVANCE CALCULATIONS

angular distribution for ($n, a^* 25$) alpha



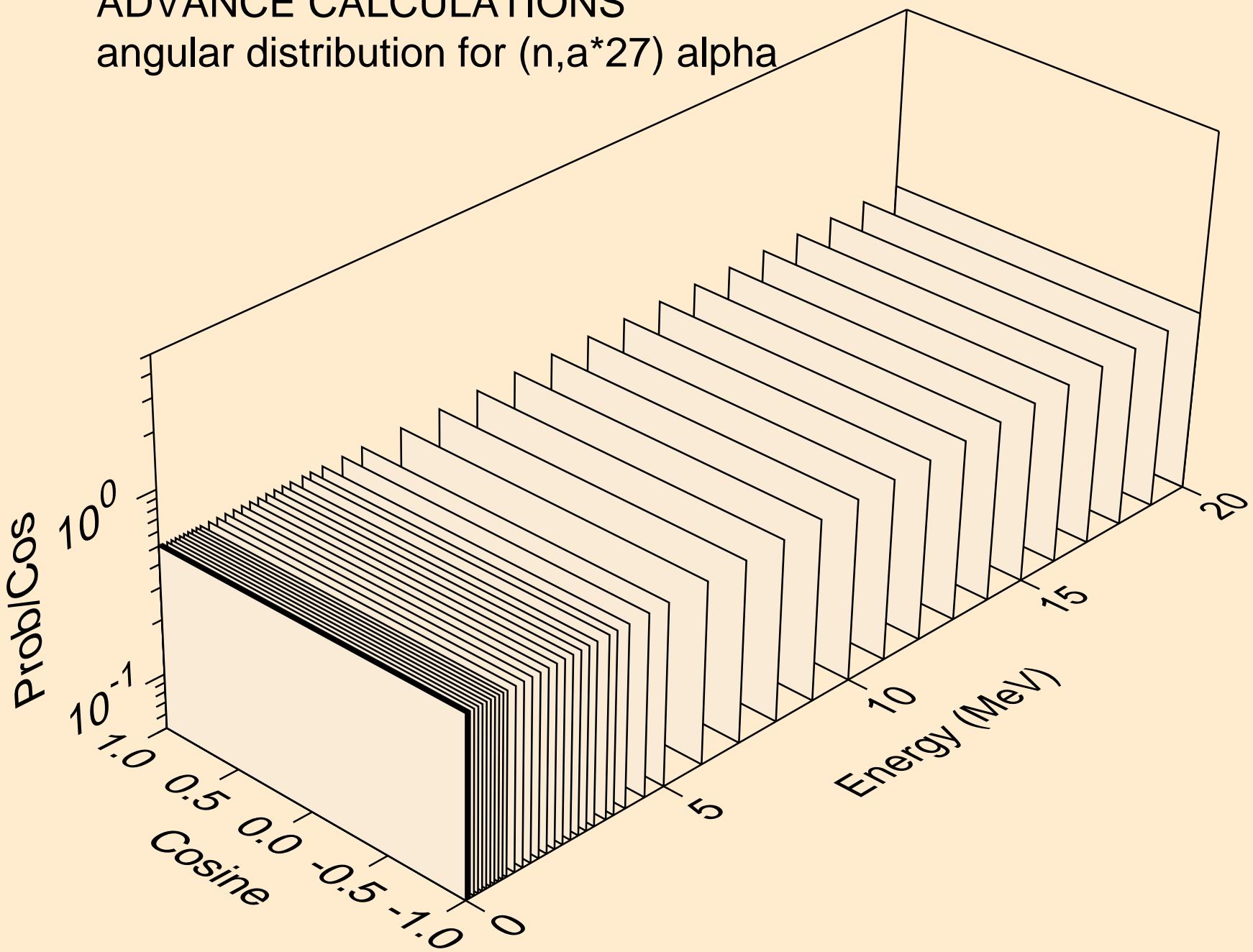
ADVANCE CALCULATIONS

angular distribution for ($n, a^* 26$) alpha



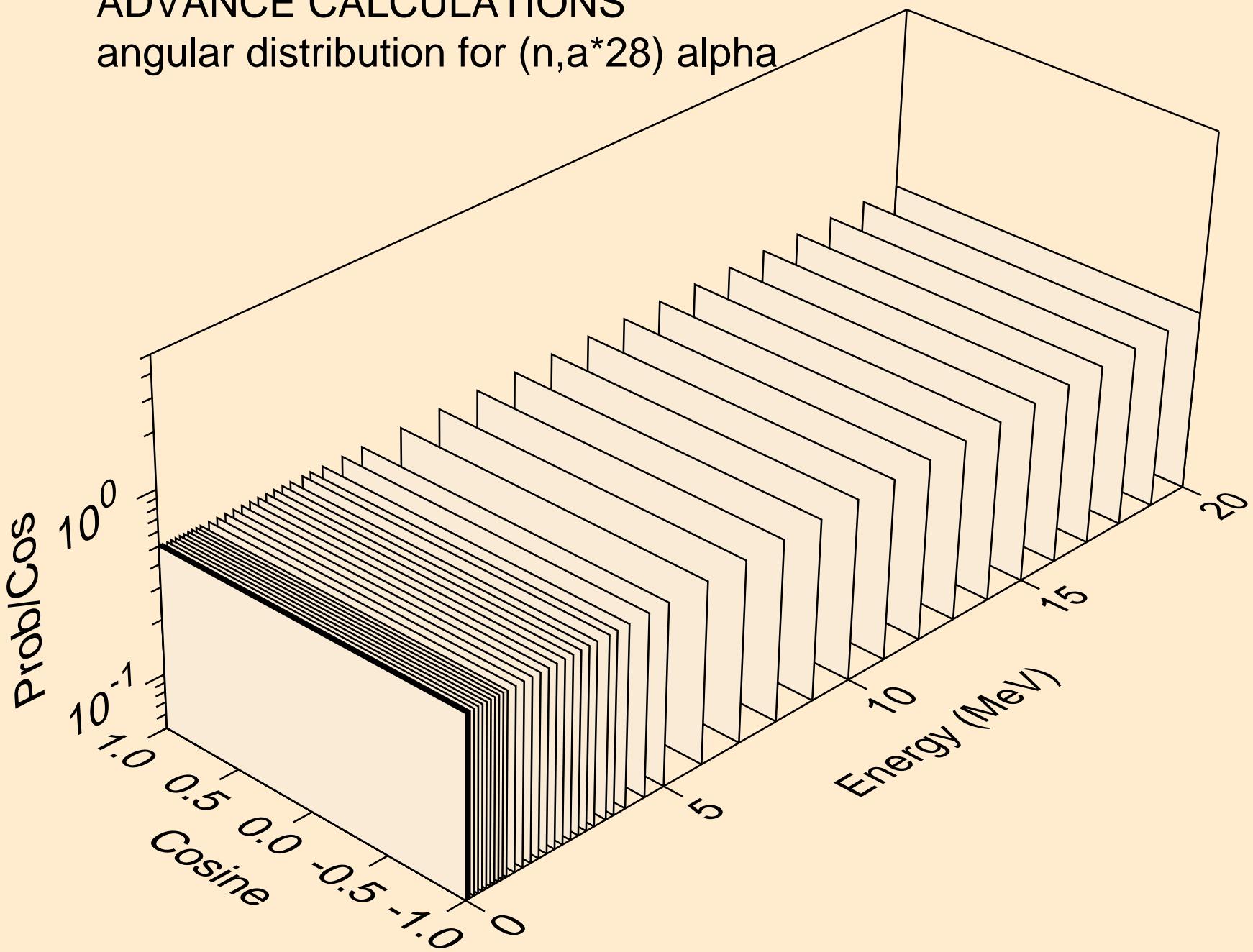
ADVANCE CALCULATIONS

angular distribution for ($n, a^* 27$) alpha



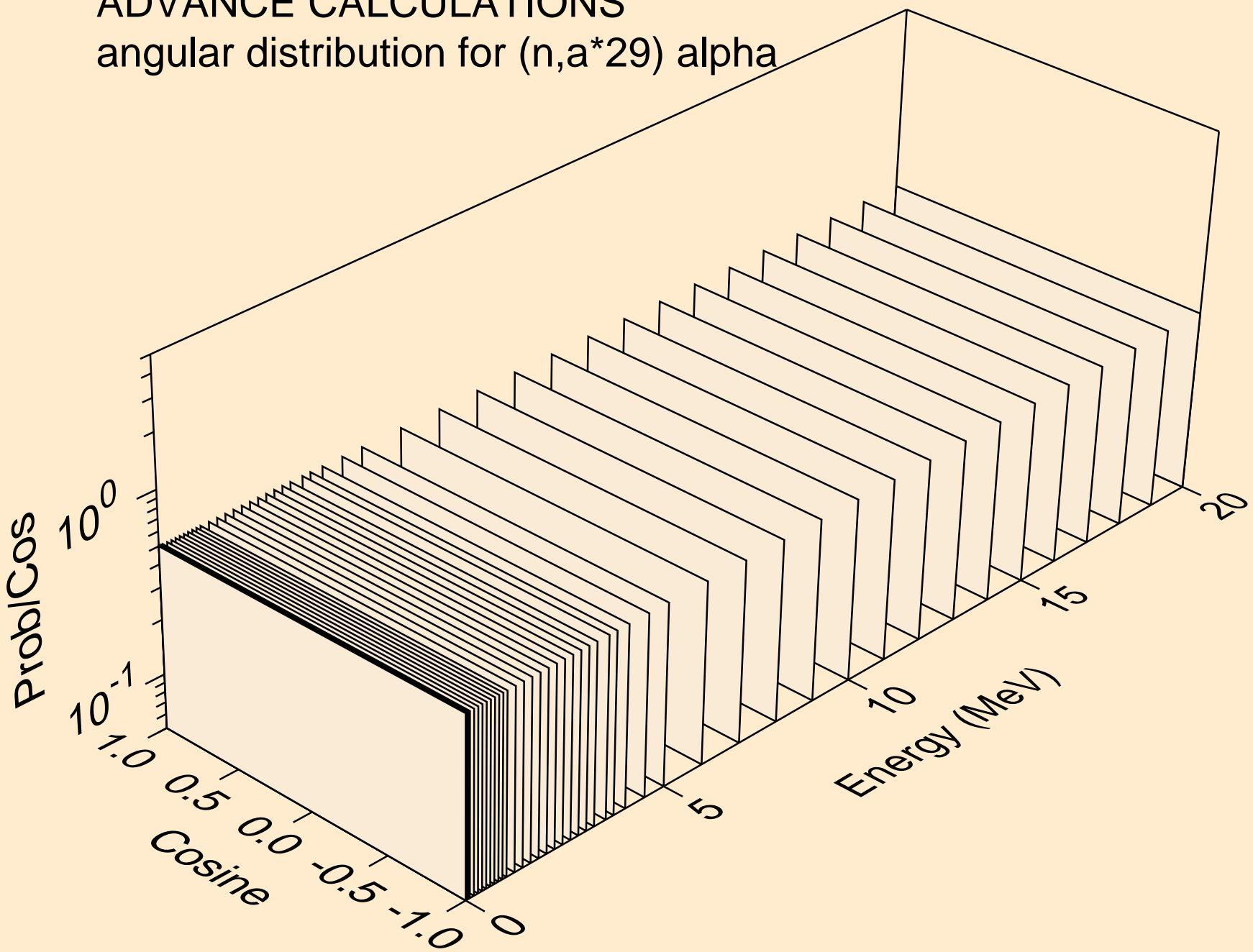
ADVANCE CALCULATIONS

angular distribution for ($n, a^* 28$) alpha



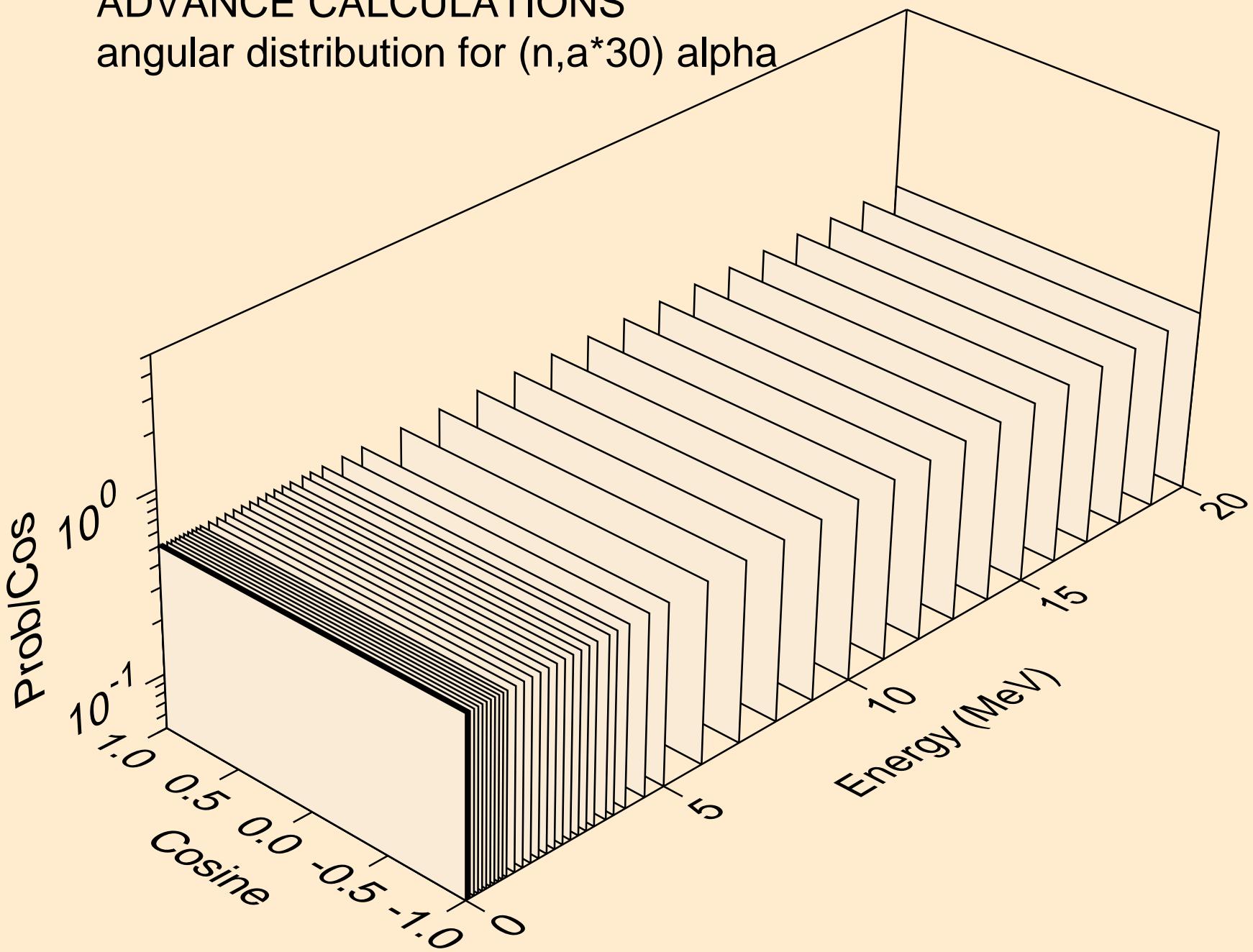
ADVANCE CALCULATIONS

angular distribution for ($n, a^* 29$) alpha



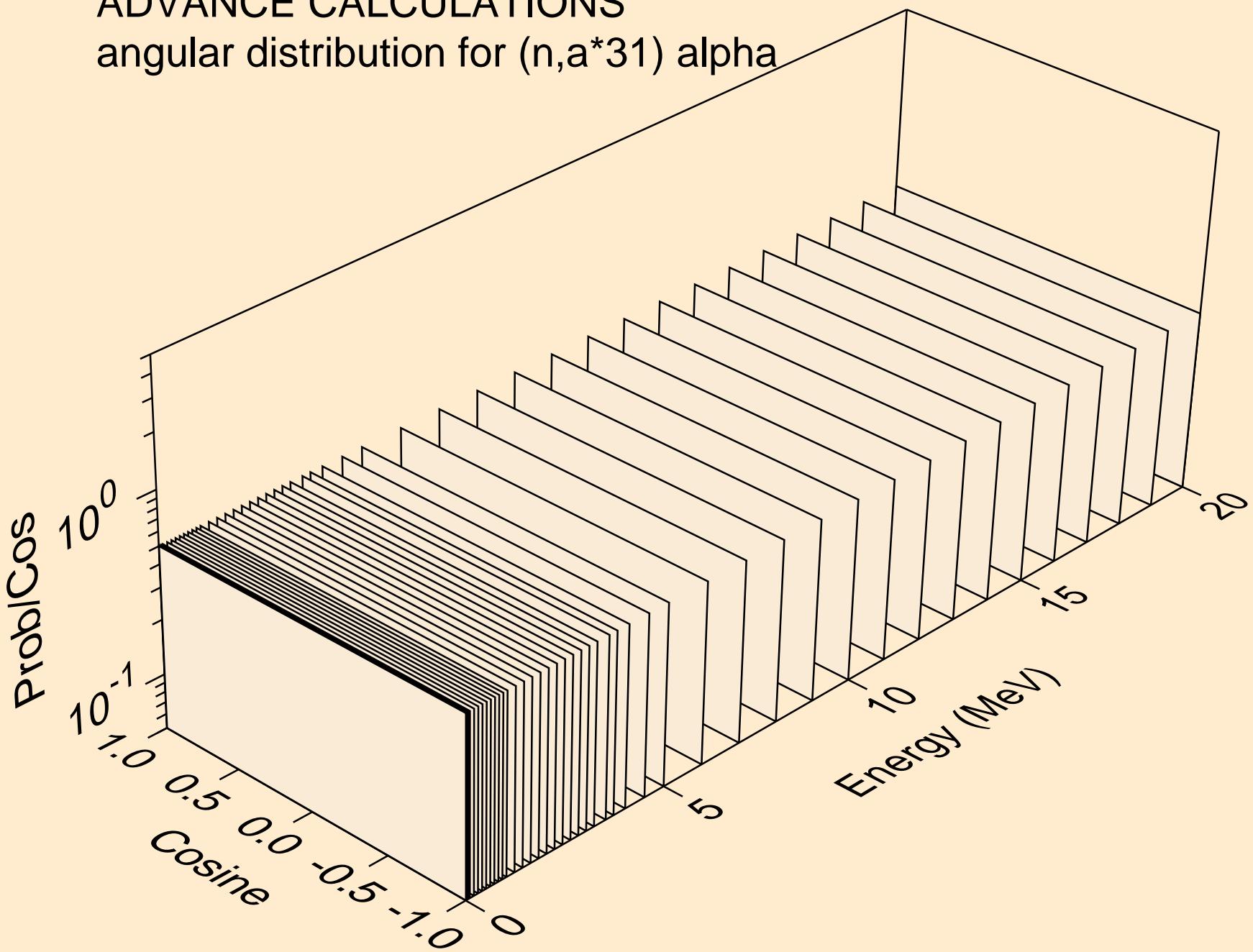
ADVANCE CALCULATIONS

angular distribution for (n,a*30) alpha



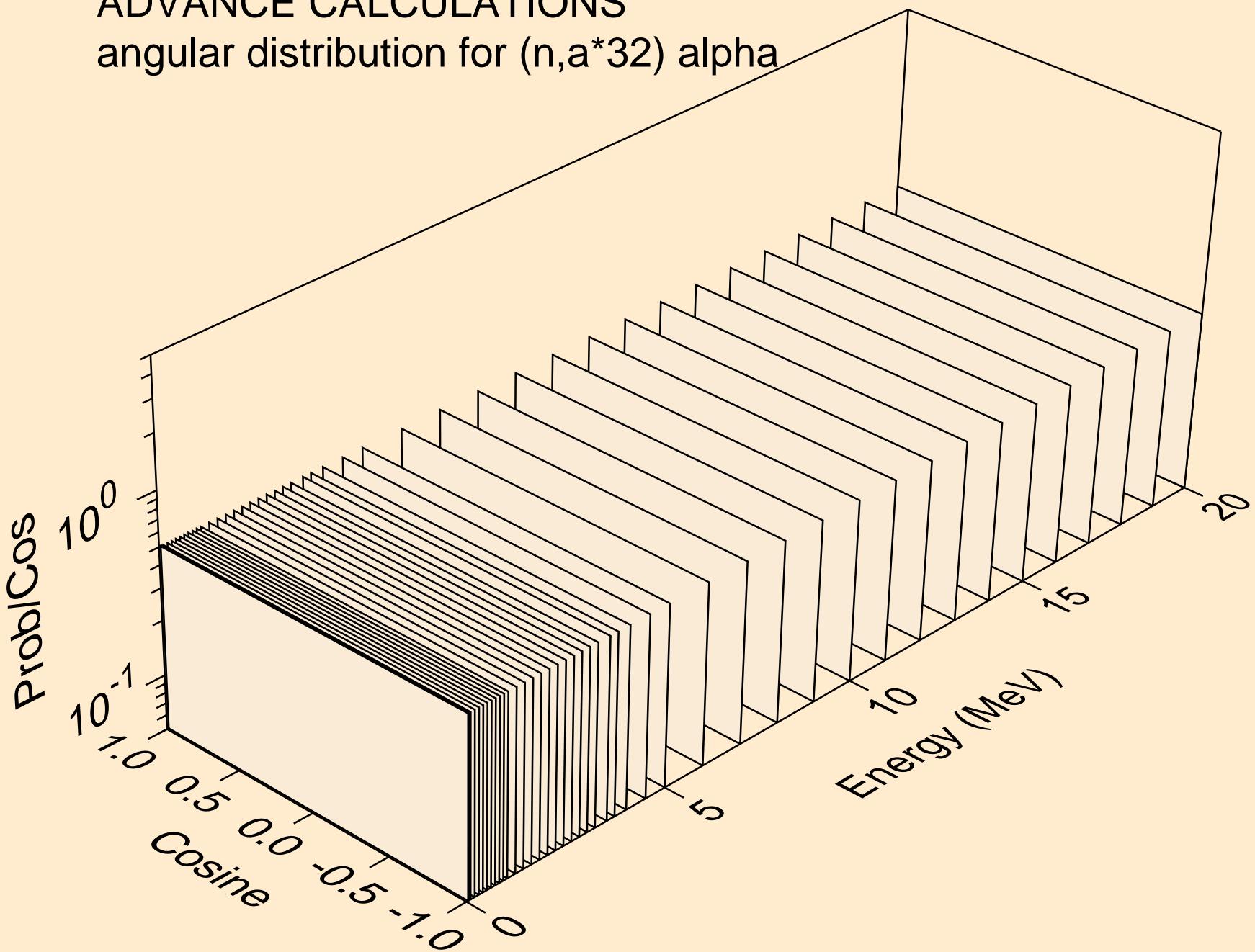
ADVANCE CALCULATIONS

angular distribution for (n, a^*31) alpha



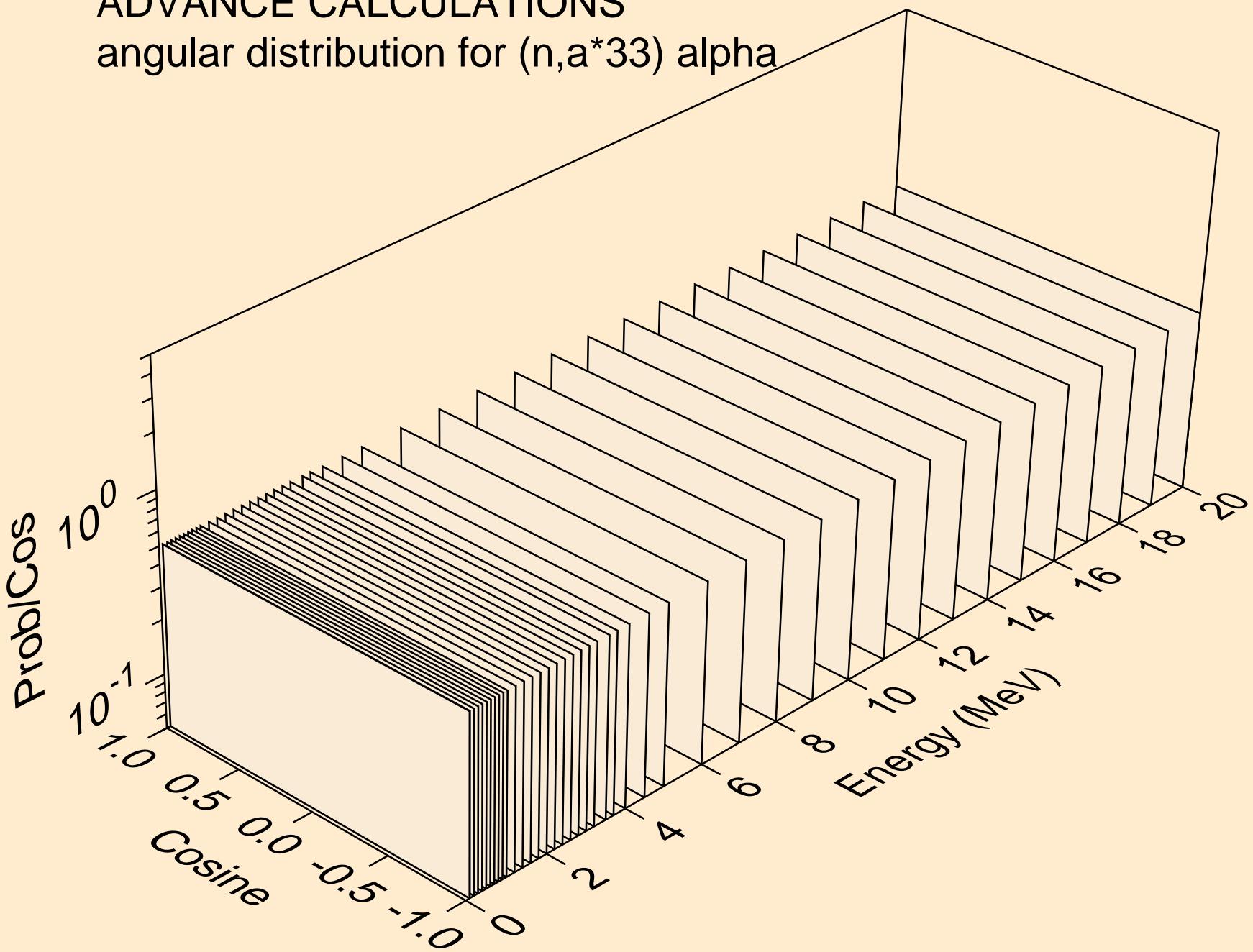
ADVANCE CALCULATIONS

angular distribution for (n, a^*32) alpha



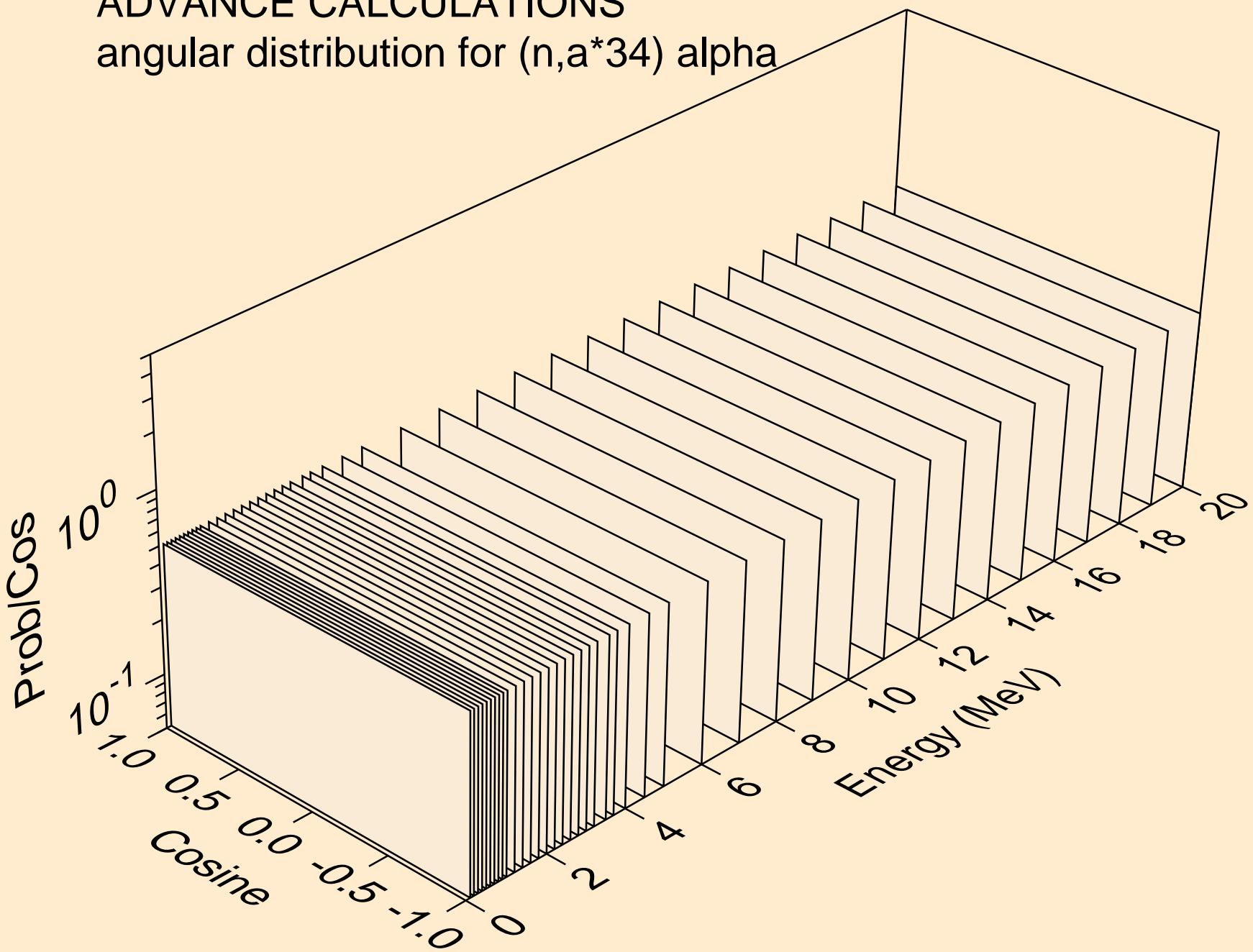
ADVANCE CALCULATIONS

angular distribution for (n, a^*33) alpha



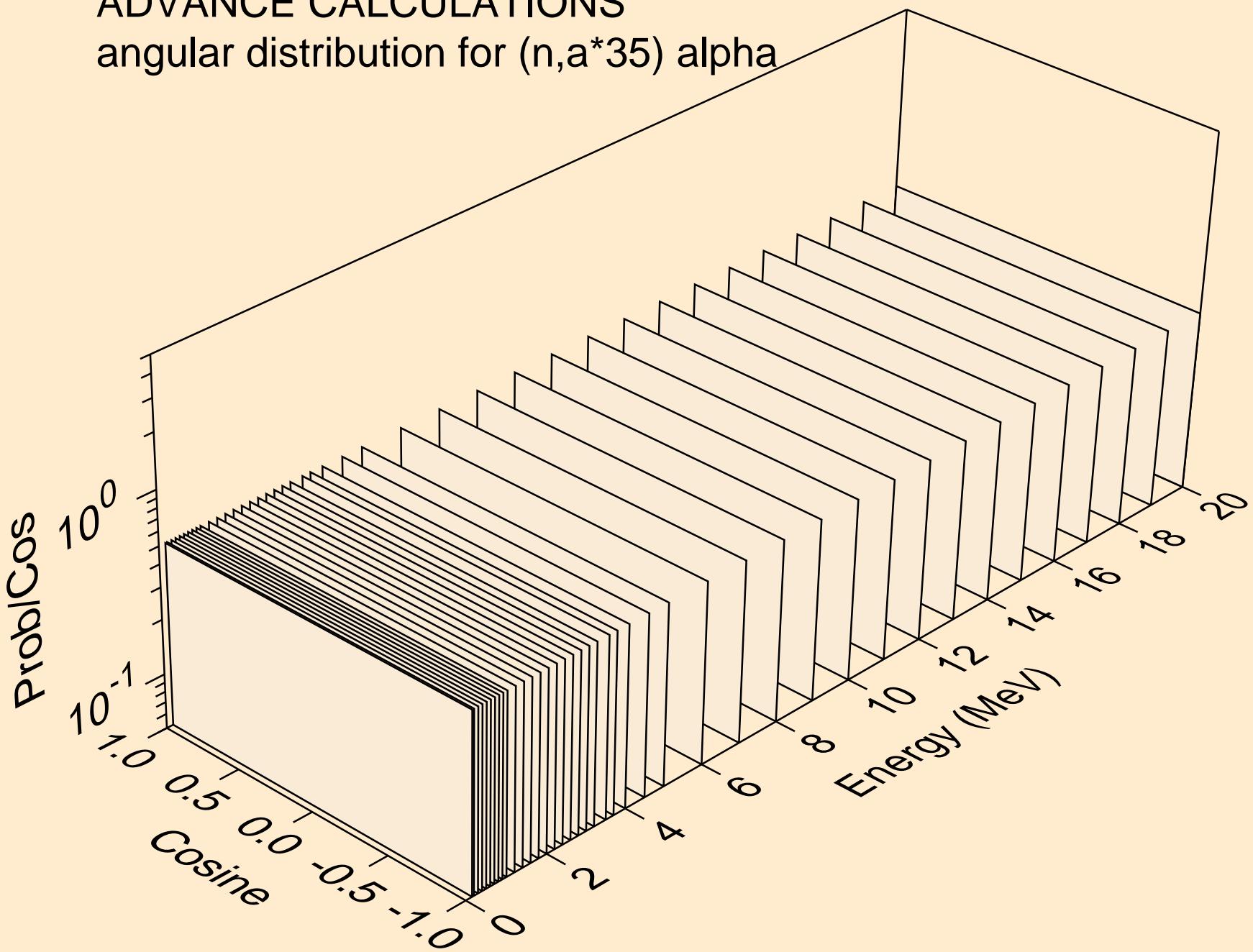
ADVANCE CALCULATIONS

angular distribution for (n, a^*34) alpha



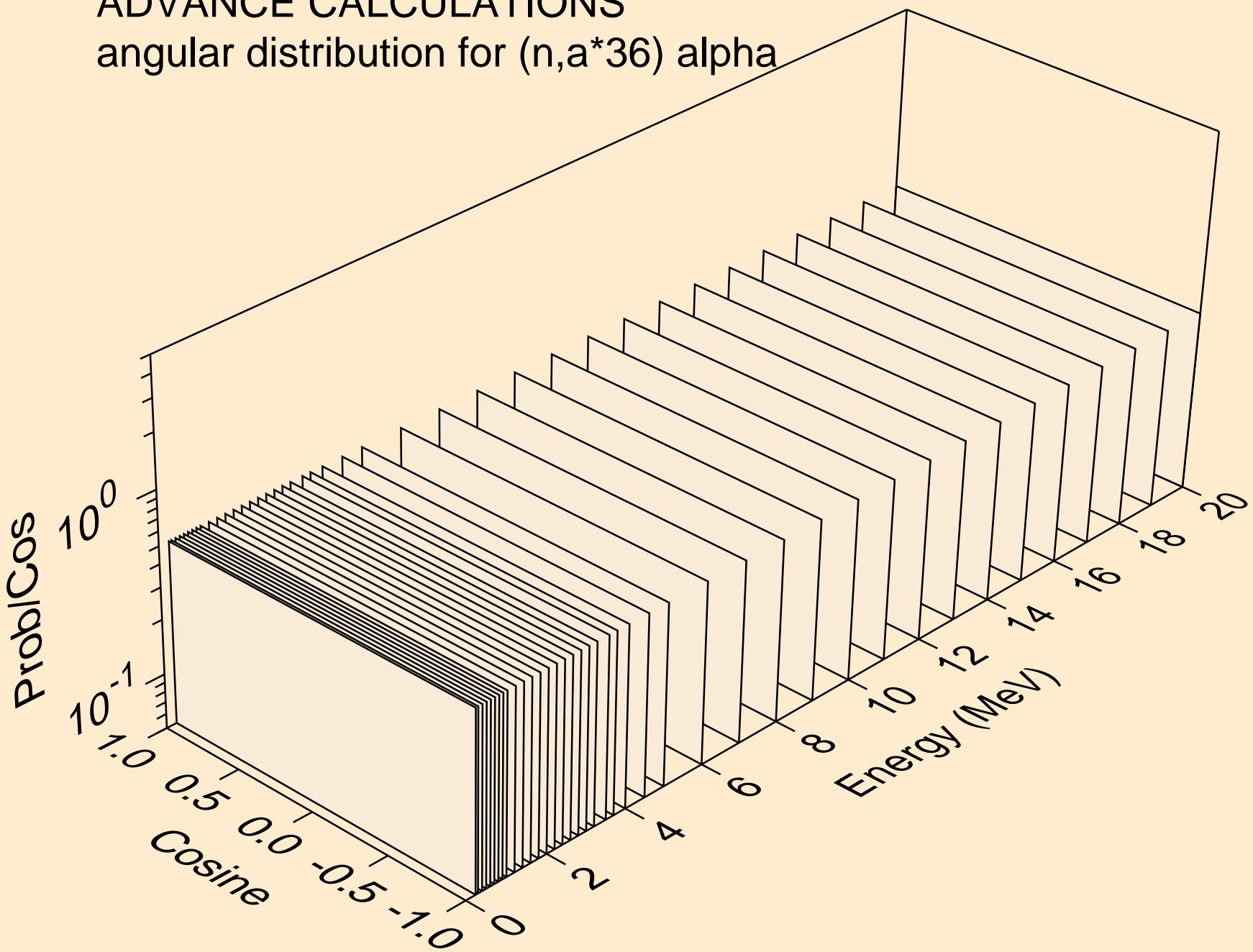
ADVANCE CALCULATIONS

angular distribution for (n, a^*35) alpha



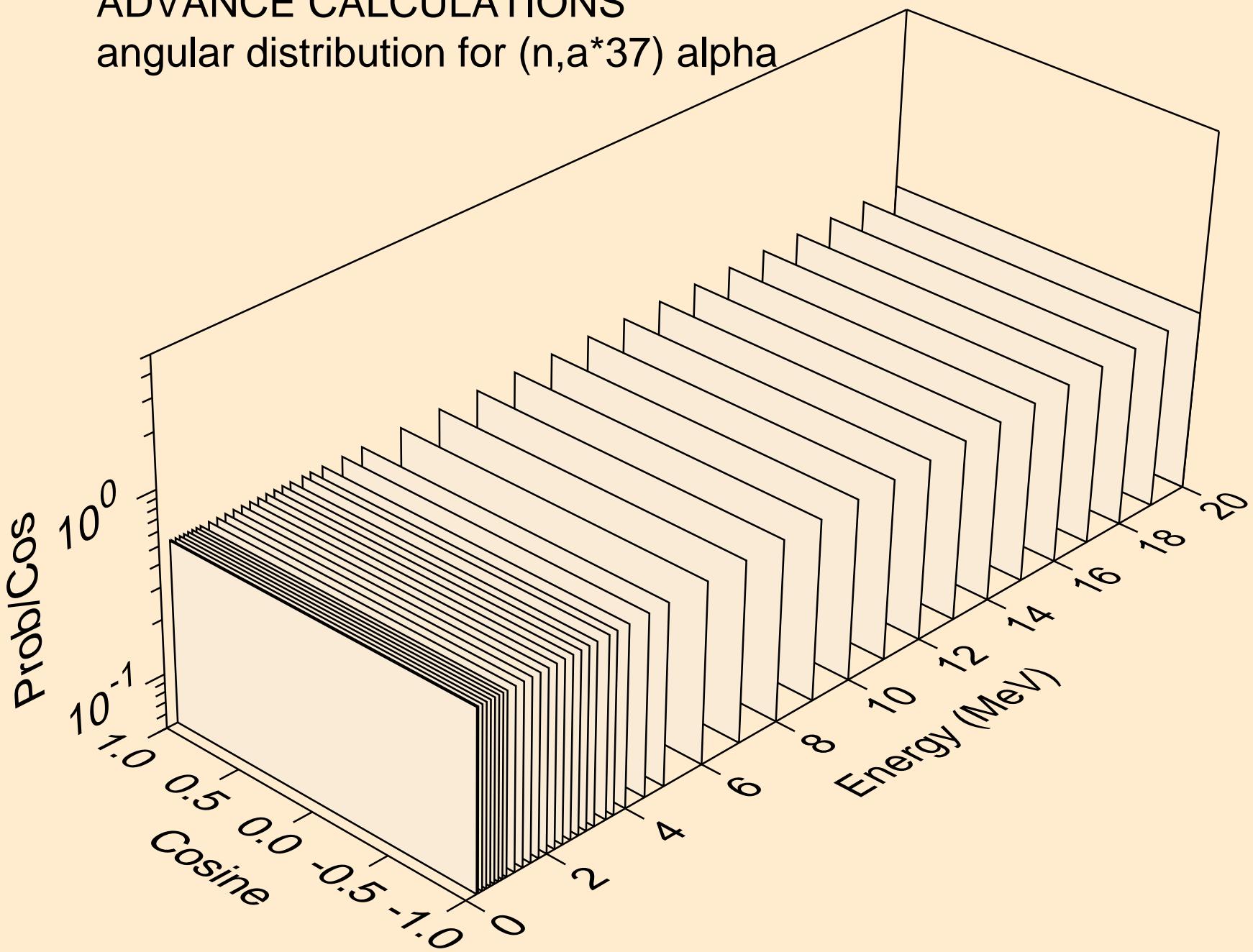
ADVANCE CALCULATIONS

angular distribution for (n,a*36) alpha



ADVANCE CALCULATIONS

angular distribution for (n, a^*37) alpha



ADVANCE CALCULATIONS

alphas from (n,a^*c)

